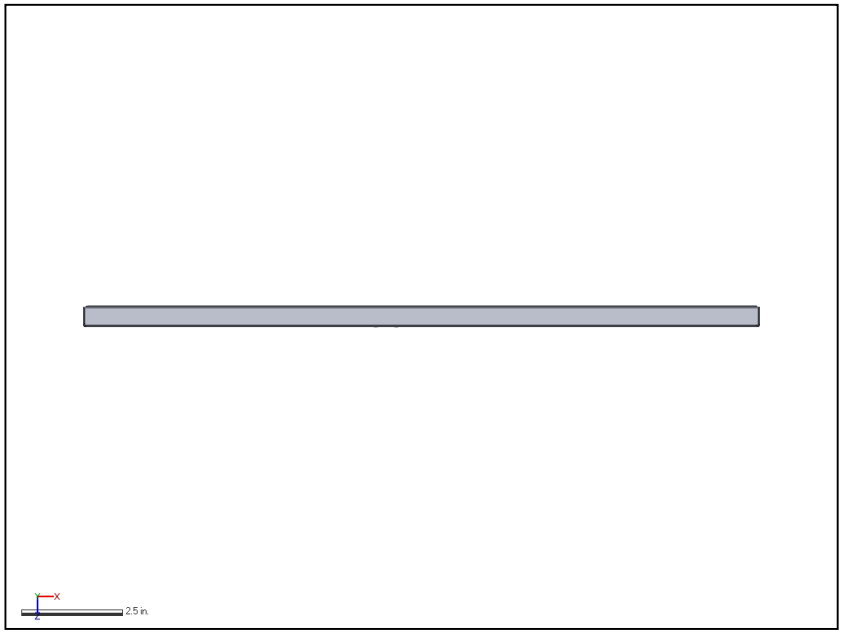
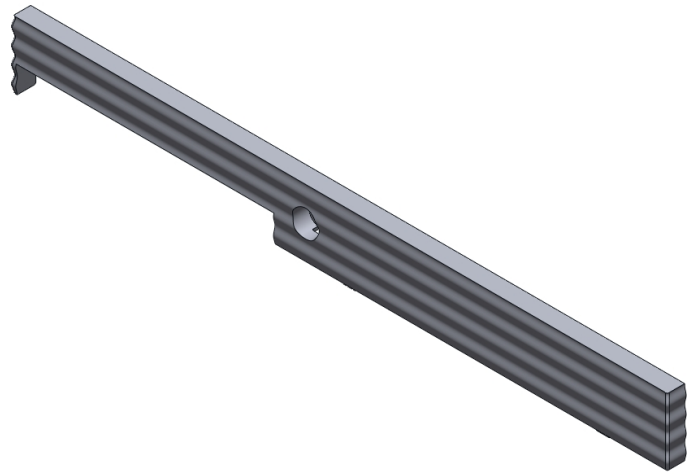
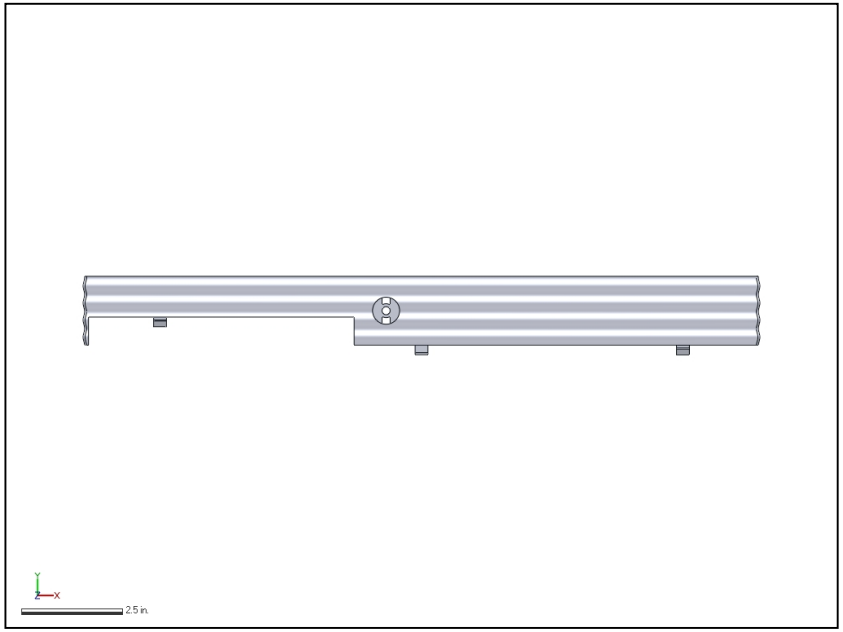
Product Name	[Product Name]
Part Name	Panel 4 Stronger Clips
Part Number	[Part Number]
Department	[Department]
Inspector	[Inspector]
Date	Jan 05, 2020
Unit	in.

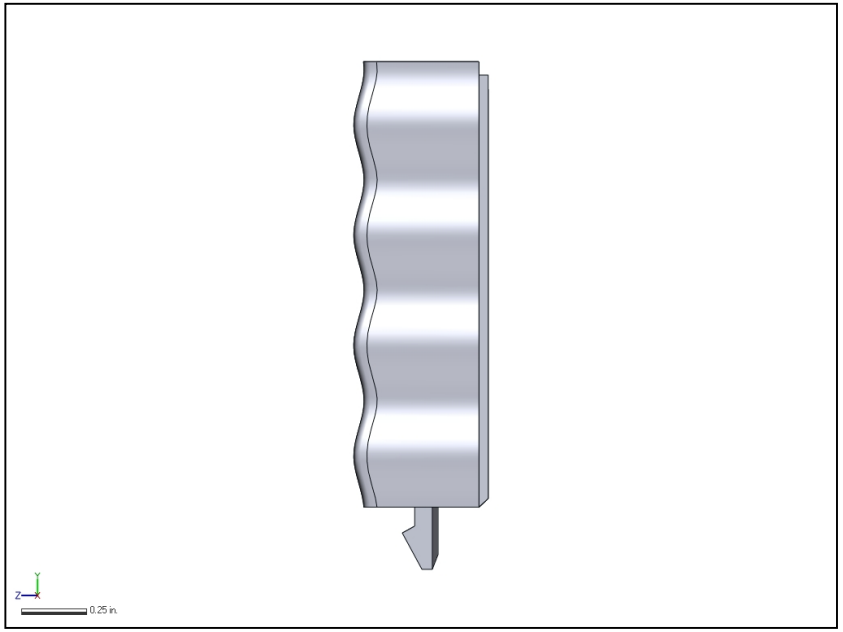
Disclaimer
The results of this analysis and forecastings are believed to be reliable but are not to be construed as providing a warranty, including any warranty of merchantability or fitness for purpose, or representation for which 3D Systems, Inc. assumes legal responsibility. Users should undertake sufficient verification and iterative testing to determine the suitability of any information presented. Nothing herein is to be taken as permission, inducement or recommendation by 3D Systems, Inc. to practice any patented invention without a license or to in any way infringe upon the intellectual property rights of any other party.

Reference Data - Panel 4 Stronger Clips



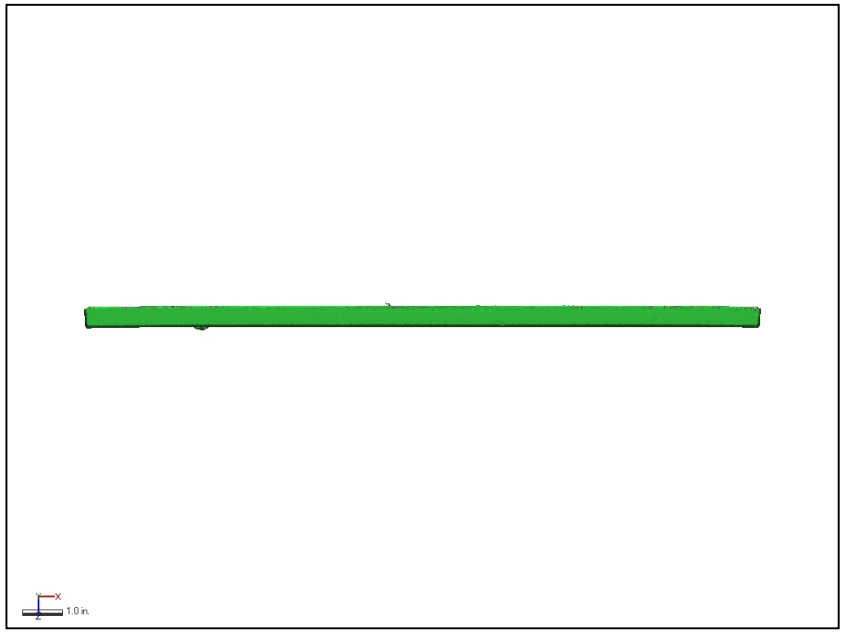


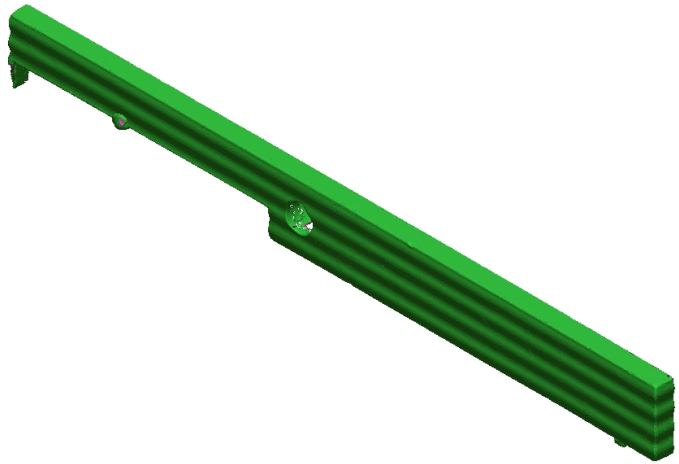


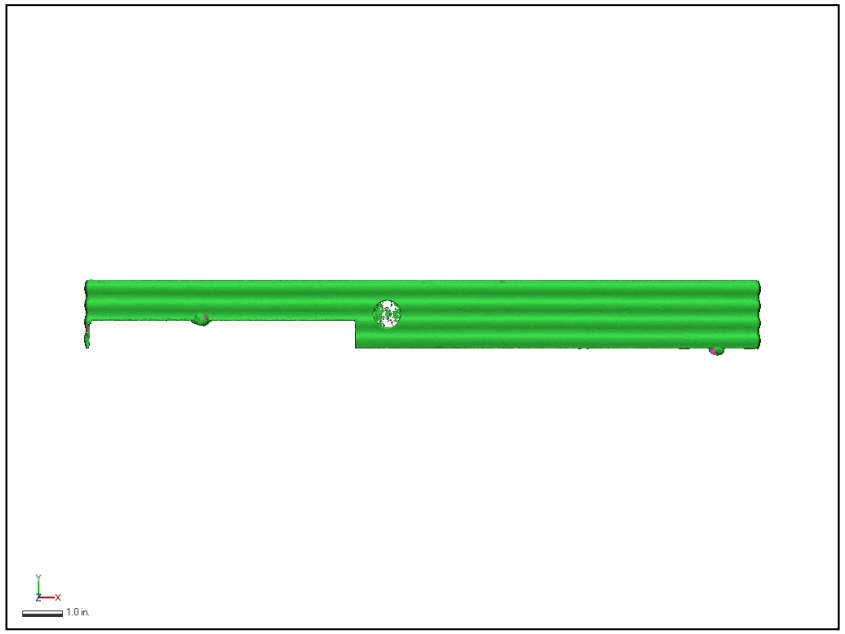


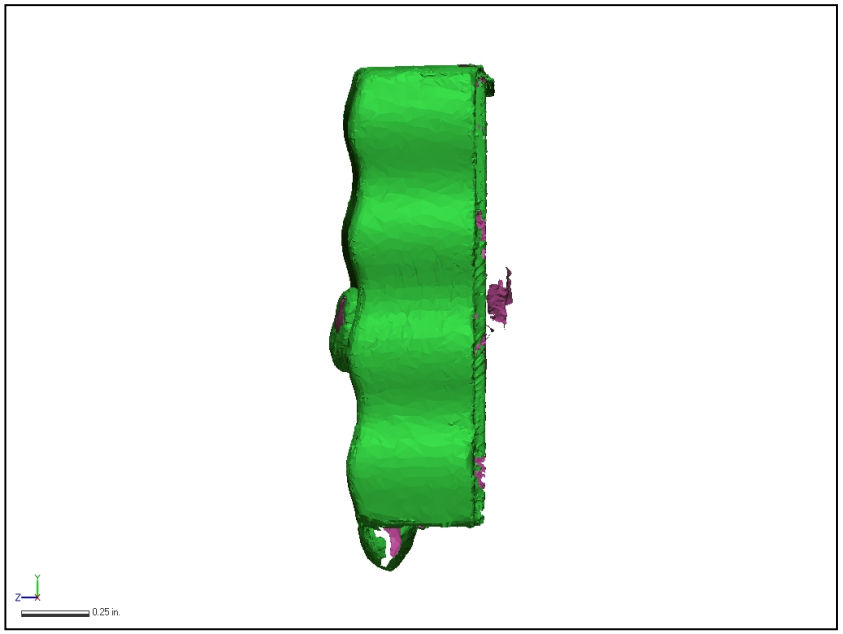
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

Measured Data - PANEL 04



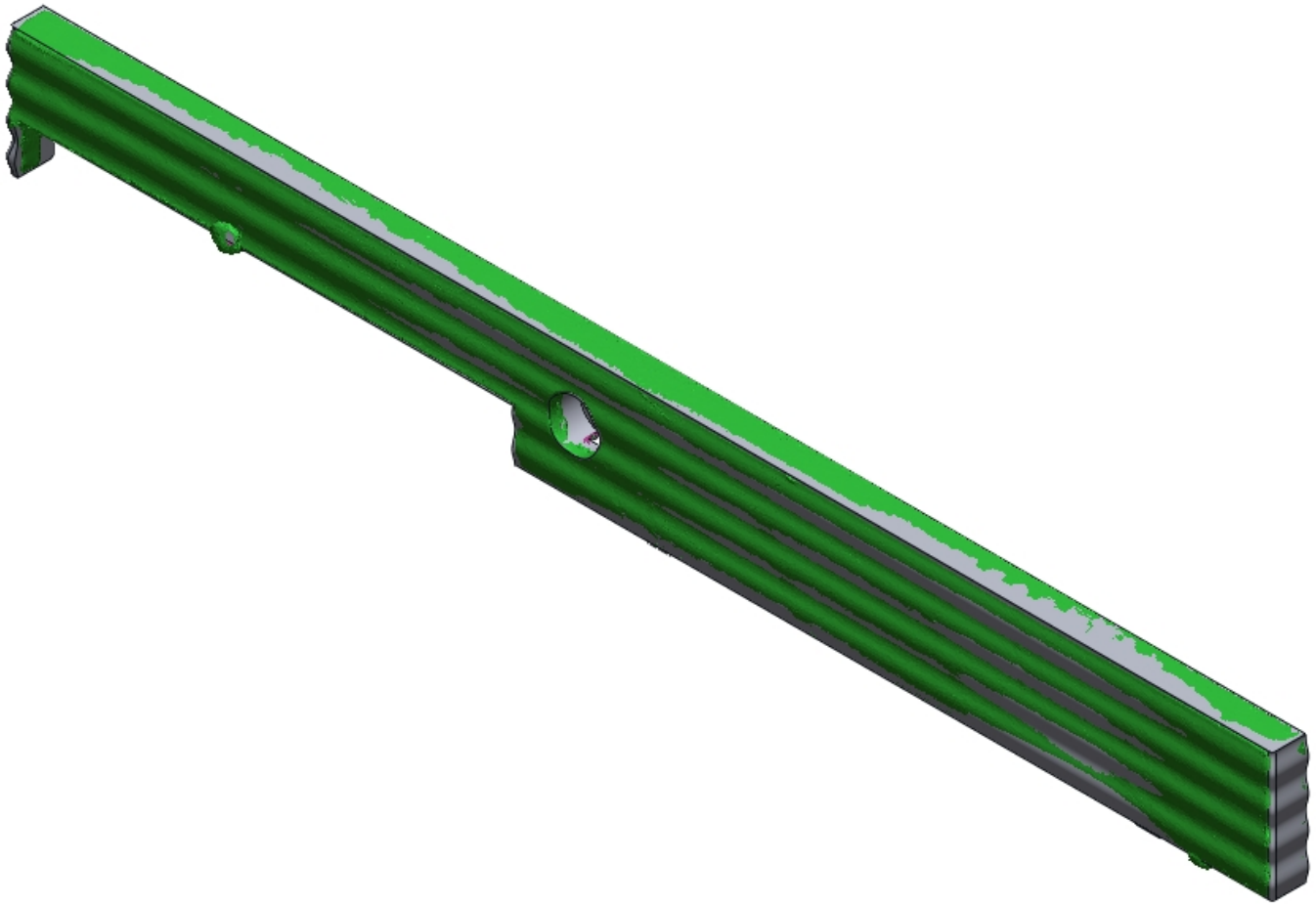


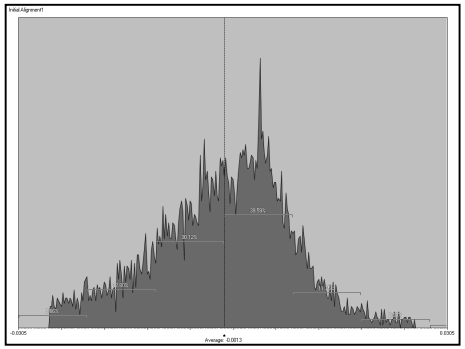




Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

Initial Alignment1

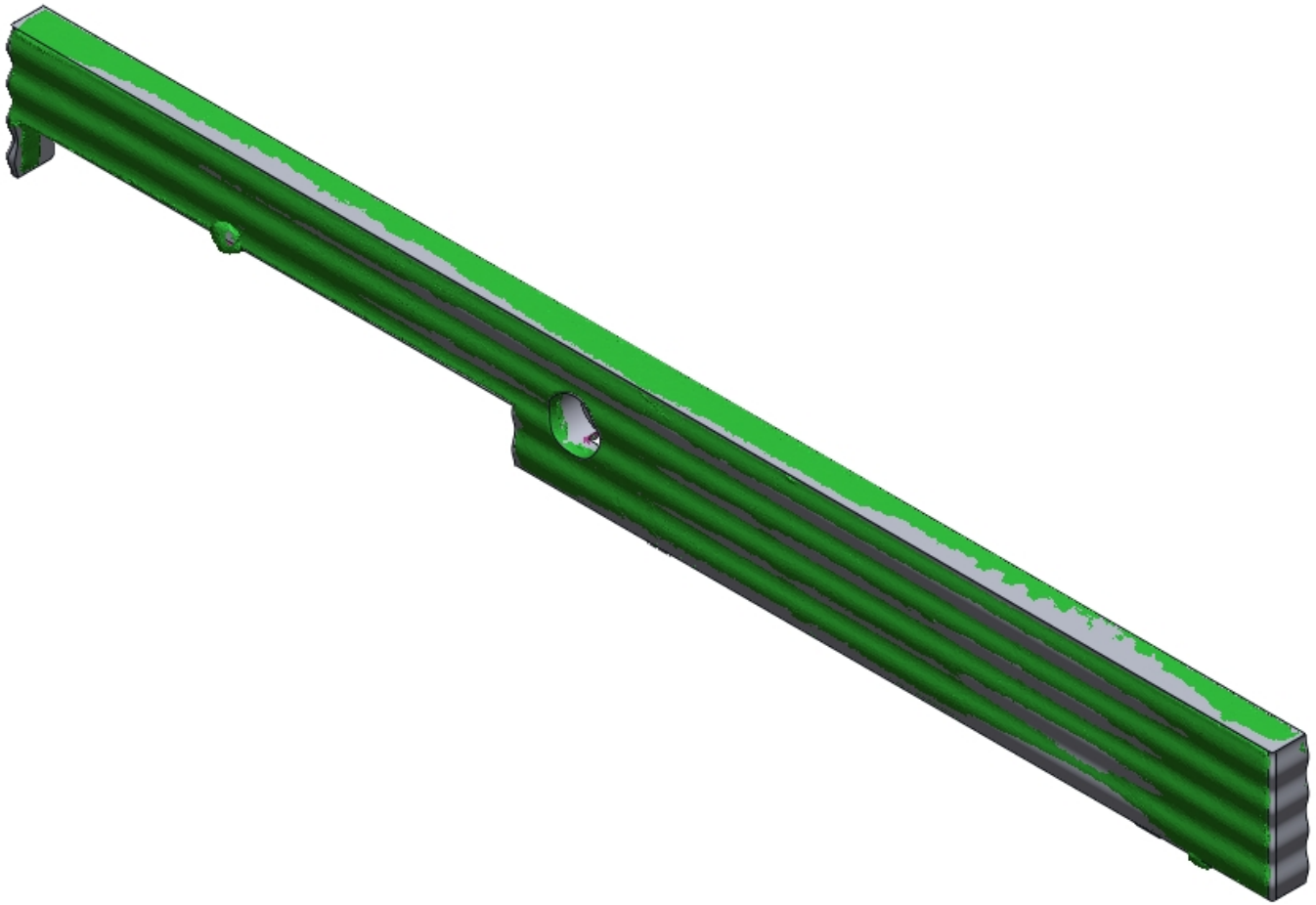


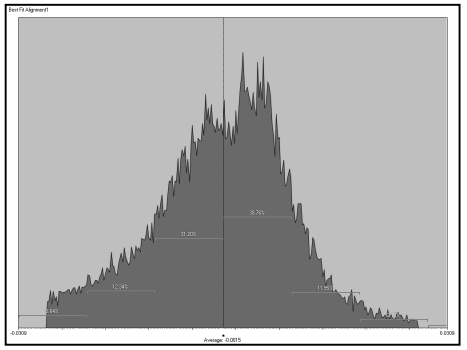


Min.	-0.0259
Max.	0.0259
Avg.	-0.0013
RMS	0.0098
Std. Dev.	0.0097
Var.	0.0024
+Avg.	0.0066
-Avg.	-0.0087

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

Best Fit Alignment1

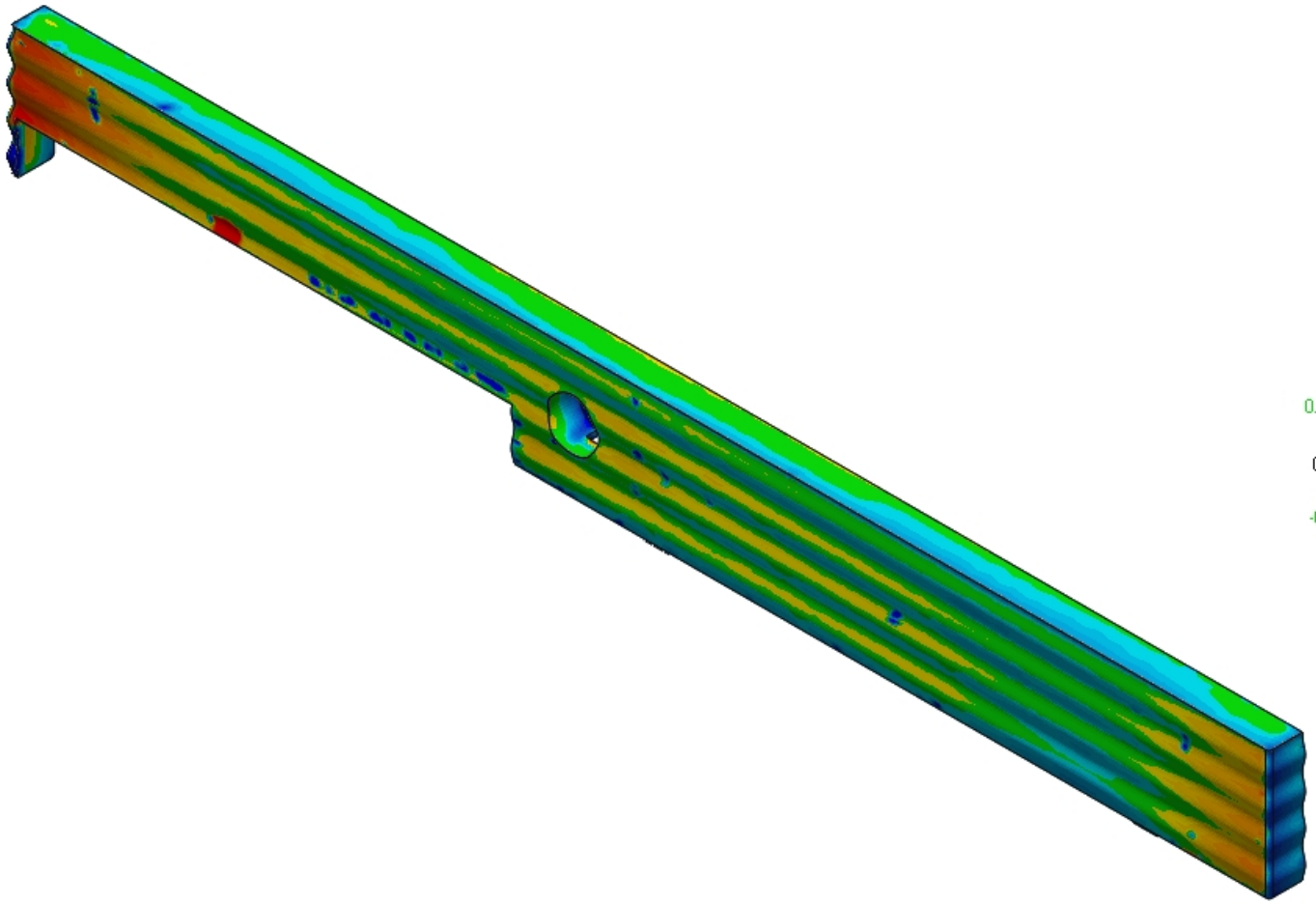


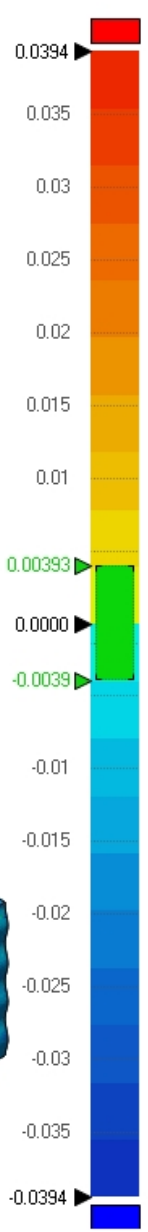


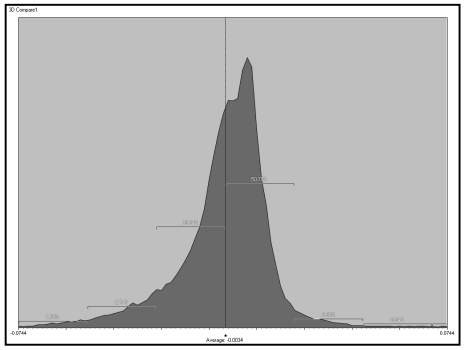
Min.	-0.0266
Max.	0.0266
Avg.	-0.0015
RMS	0.0099
Std. Dev.	0.0098
Var.	0.0024
+Avg.	0.0067
-Avg.	-0.0088

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

3D Compare1



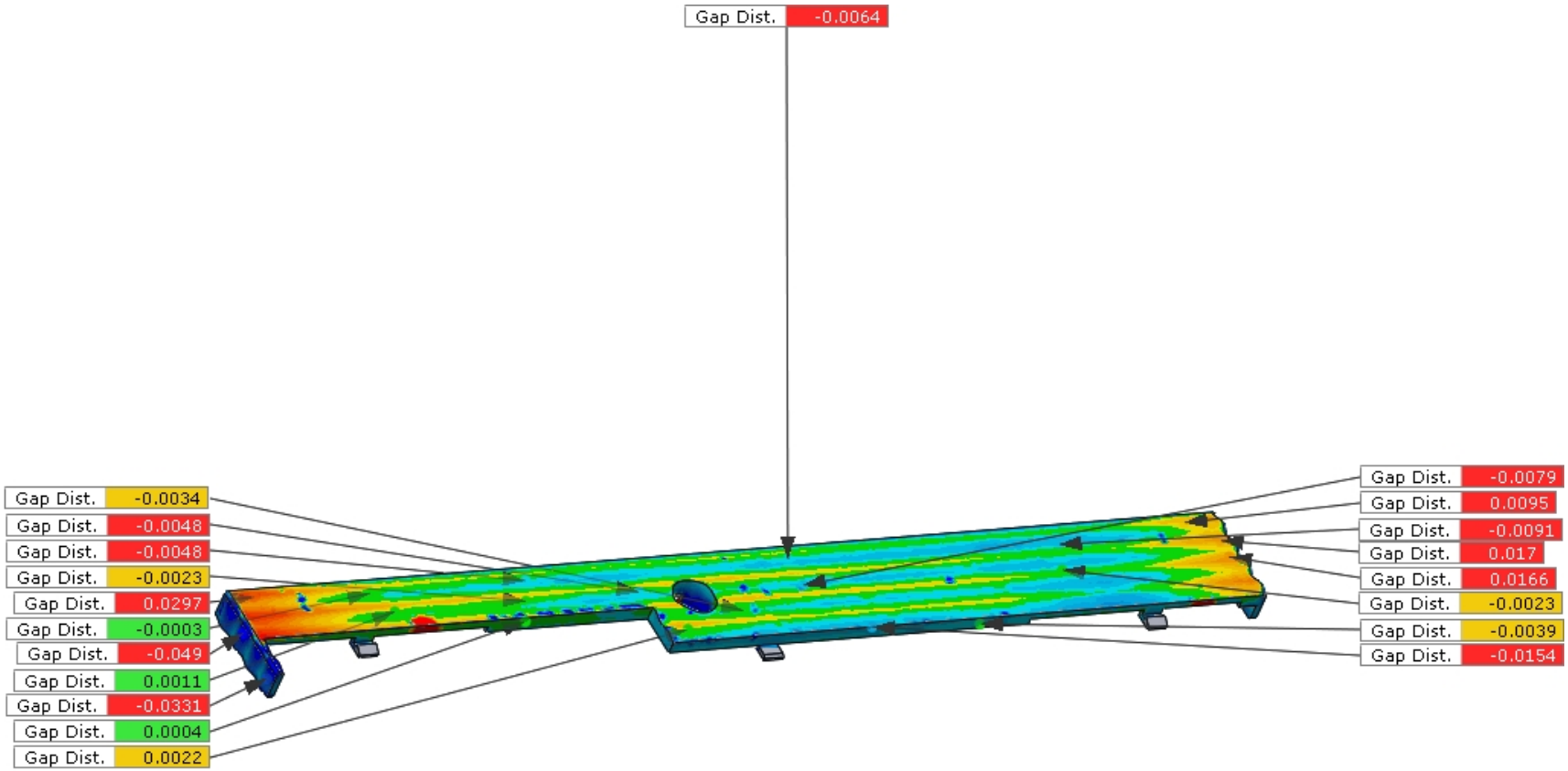




Min.	-0.2077
Max.	0.2099
Avg.	-0.0034
RMS	0.0239
Std. Dev.	0.0237
Var.	0.0142
+Avg.	0.0114
-Avg.	-0.0152
In Tol.(%)	52.337
Out Tol.(%)	47.663
Over Tol.(%)	31.2938
Under Tol.(%)	16.3692

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

CMP1

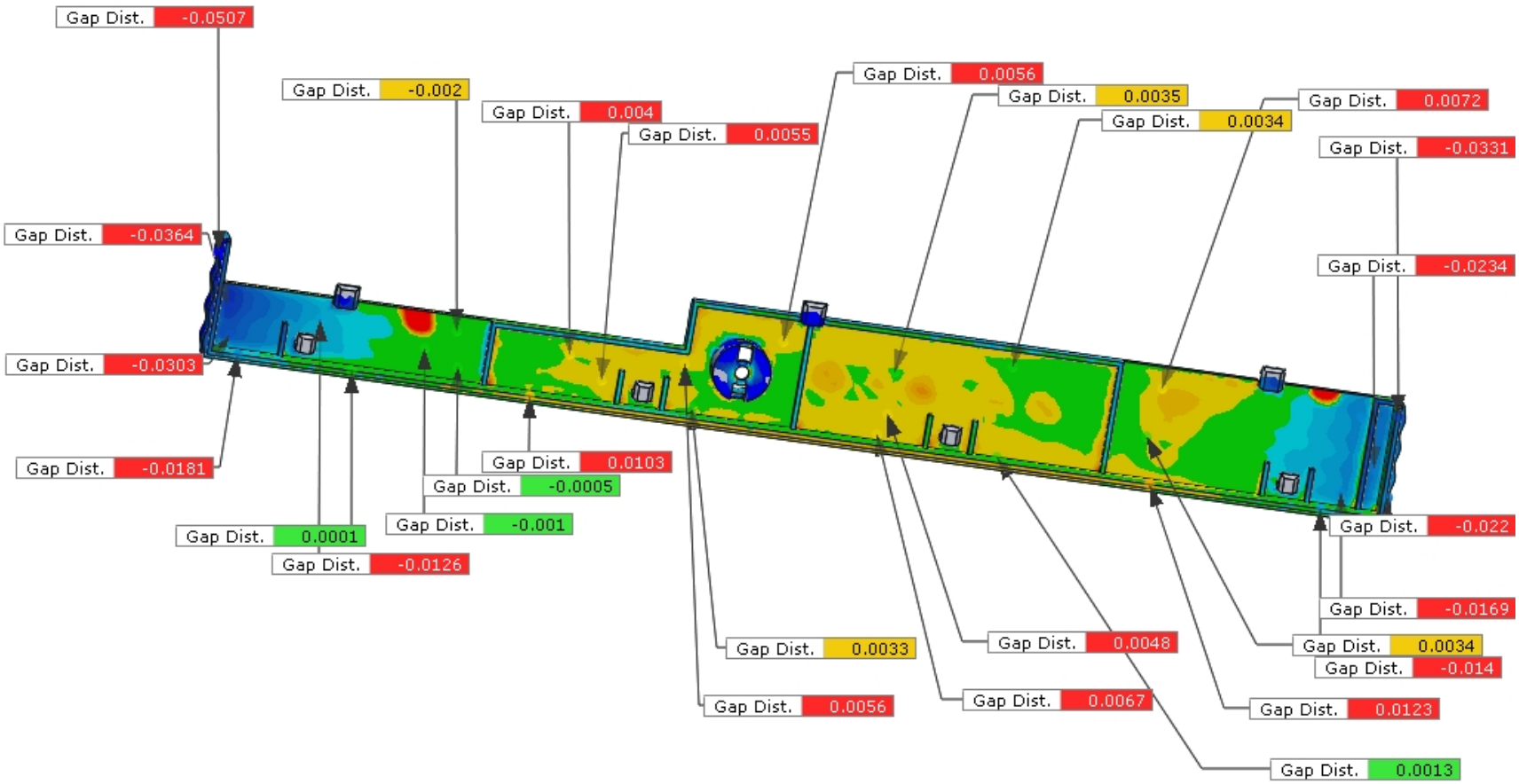


Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

Name	Reference Pos.			Measured Pos.			Gap Dist.	Tolerance
	X	Y	Z	X	Y	Z		
CMP1: 1	0.0062	0.1405	0.2639	0.0385	0.1476	0.2639	-0.0331	±0.00393701
CMP1: 2	0.0095	0.9637	0.3601	0.0571	0.9752	0.36	-0.049	±0.00393701
CMP1: 3	0.4	1.5	0.5052	0.4	1.5058	0.5344	0.0297	±0.00393701
CMP1: 4	2.3	1.4001	0.5049	2.3	1.4001	0.5046	-0.0003	±0.00393701
CMP1: 5	2.5	1	0.5083	2.5	0.9999	0.5095	0.0011	±0.00393701
CMP1: 6	4.9	1.4001	0.5049	4.9	1.4011	0.5002	-0.0048	±0.00393701
CMP1: 7	4.7	1	0.5083	4.7	1.0003	0.506	-0.0023	±0.00393701
CMP1: 8	4.5622	0.6881	0.4252	4.5622	0.6877	0.4252	0.0004	±0.00393701
CMP1: 9	6.6	1	0.5083	6.6	1.0006	0.5036	-0.0048	±0.00393701
CMP1: 10	7	0.2	0.5106	7	0.2	0.5128	0.0022	±0.00393701
CMP1: 11	8.1	0.5	0.4892	8.1	0.5008	0.4859	-0.0034	±0.00393701
CMP1: 12	9.3	1.4001	0.5049	9.3	1.4014	0.4986	-0.0064	±0.00393701
CMP1: 13	9.3	0.8999	0.4842	9.3	0.902	0.4766	-0.0079	±0.00393701
CMP1: 14	11.8547	0	0.3589	11.8547	0.0039	0.3589	-0.0039	±0.00393701
CMP1: 15	13.8	1.3	0.4796	13.8	1.3018	0.4706	-0.0091	±0.00393701
CMP1: 16	13.6	0.8	0.4735	13.6	0.7998	0.4712	-0.0023	±0.00393701
CMP1: 17	16	1.5	0.5052	16	1.5018	0.5146	0.0095	±0.00393701
CMP1: 18	16.4	1.1	0.5012	16.4	1.1043	0.5176	0.017	±0.00393701
CMP1: 19	16.4	0.8	0.4735	16.4	0.802	0.4899	0.0166	±0.00393701
CMP1: 20	10	0	0.4725	10	0.0154	0.4725	-0.0154	±0.00393701
Min.	0.0062	0.0000	0.2639	0.0385	0.0039	0.2639	-0.0490	
Max.	16.4000	1.5000	0.5106	16.4000	1.5058	0.5344	0.0297	

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

CMP2



Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

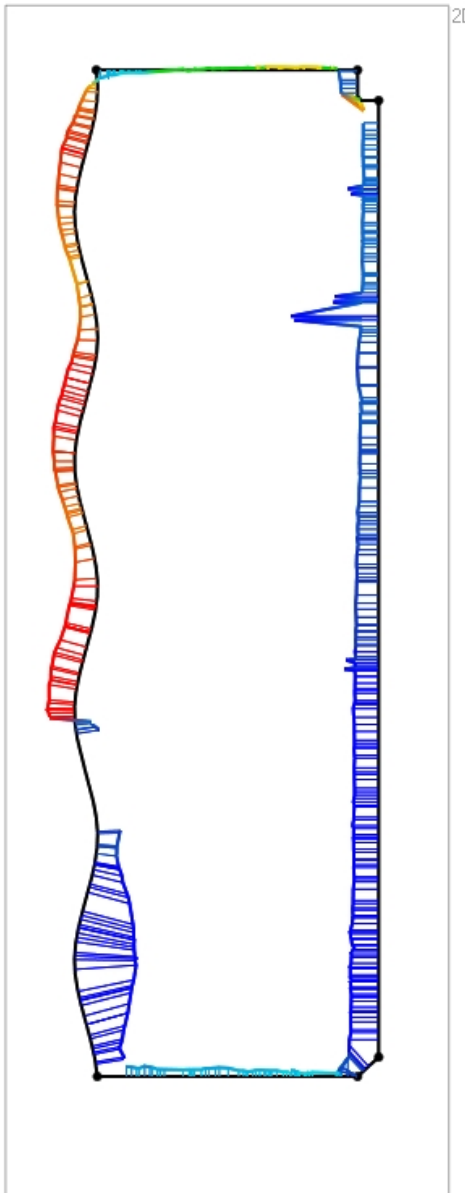
Name	Reference Pos.			Measured Pos.			Gap Dist.	Tolerance
	X	Y	Z	X	Y	Z		
CMP2: 1	0.3	1	0.3736	0.3	1	0.4101	-0.0364	±0.00393701
CMP2: 2	0	0.2	0.0354	0	0.2	0.0861	-0.0507	±0.00393701
CMP2: 3	0.4	1.4	0.3736	0.4	1.4	0.4039	-0.0303	±0.00393701
CMP2: 4	0.5	1.5846	0	0.5	1.5846	0.0181	-0.0181	±0.00393701
CMP2: 5	1.6	1	0.3736	1.6	1	0.3863	-0.0126	±0.00393701
CMP2: 6	2.1	1.5846	0	2.1	1.5846	-0.0001	0.0001	±0.00393701
CMP2: 7	3.1	1.2	0.3736	3.1	1.2	0.3746	-0.001	±0.00393701
CMP2: 8	3.5	0.9	0.3736	3.5	0.9	0.3757	-0.002	±0.00393701
CMP2: 9	3.6	1.4	0.3736	3.6	1.4	0.3742	-0.0005	±0.00393701
CMP2: 10	4.6	1.5846	0	4.6	1.5846	-0.0103	0.0103	±0.00393701
CMP2: 11	5.1	1	0.3736	5.1	1	0.3696	0.004	±0.00393701
CMP2: 12	5.6	1.3	0.3736	5.6	1.3	0.3681	0.0055	±0.00393701
CMP2: 13	6.7	0.9	0.3736	6.7	0.9	0.368	0.0056	±0.00393701
CMP2: 14	6.9	1.5	0.3736	6.9	1.5	0.3704	0.0033	±0.00393701
CMP2: 15	8	0.4	0.3736	8	0.4	0.368	0.0056	±0.00393701
CMP2: 16	9.5	1.5	0.3736	9.5	1.5	0.367	0.0067	±0.00393701
CMP2: 17	9.6	0.6	0.3736	9.6	0.6	0.3702	0.0035	±0.00393701
CMP2: 18	9.6	1.2	0.3736	9.6	1.2	0.3688	0.0048	±0.00393701
CMP2: 19	11.2	1.5846	0.3736	11.2	1.5833	0.3736	0.0013	±0.00393701
CMP2: 20	11.2	0.3	0.3736	11.2	0.3	0.3702	0.0034	±0.00393701
CMP2: 21	13.2	1	0.3736	13.2	1	0.3703	0.0034	±0.00393701
CMP2: 22	13.3	0.3	0.3736	13.3	0.3	0.3664	0.0072	±0.00393701
CMP2: 23	13.3	1.5846	0	13.3	1.5846	-0.0123	0.0123	±0.00393701
CMP2: 24	16.1	0.3	0.3736	16.1	0.3	0.3926	-0.019	±0.00393701
CMP2: 25	16	1.4	0.3736	16	1.4	0.3906	-0.0169	±0.00393701
CMP2: 26	16.6	1.3	0.0354	16.6	1.3	0.0574	-0.022	±0.00393701
CMP2: 27	16.5506	0.1472	0	16.5506	0.1472	0.0331	-0.0331	±0.00393701

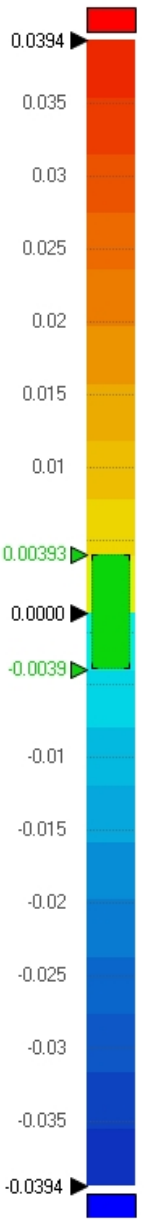
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

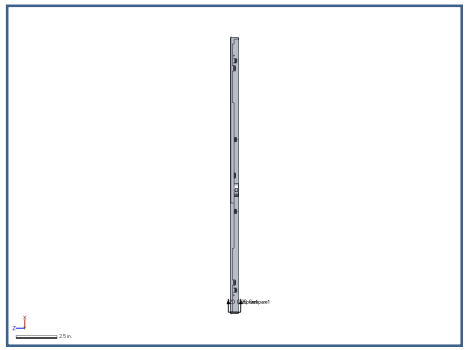
Name	Reference Pos.			Measured Pos.			Gap Dist.	Tolerance
	X	Y	Z	X	Y	Z		
CMP2: 28	16.4	1	0.3736	16.4	1	0.397	-0.0234	±0.00393701
CMP2: 29	15.7	1.5846	0	15.7	1.5846	0.014	-0.014	±0.00393701
Min.	0.0000	0.1472	0.0000	0.0000	0.1472	-0.0123	-0.0507	
Max.	16.6000	1.5846	0.3736	16.6000	1.5846	0.4101	0.0123	

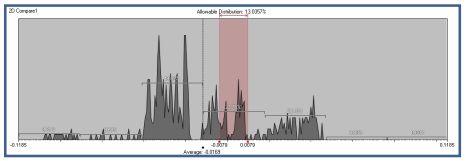
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare1





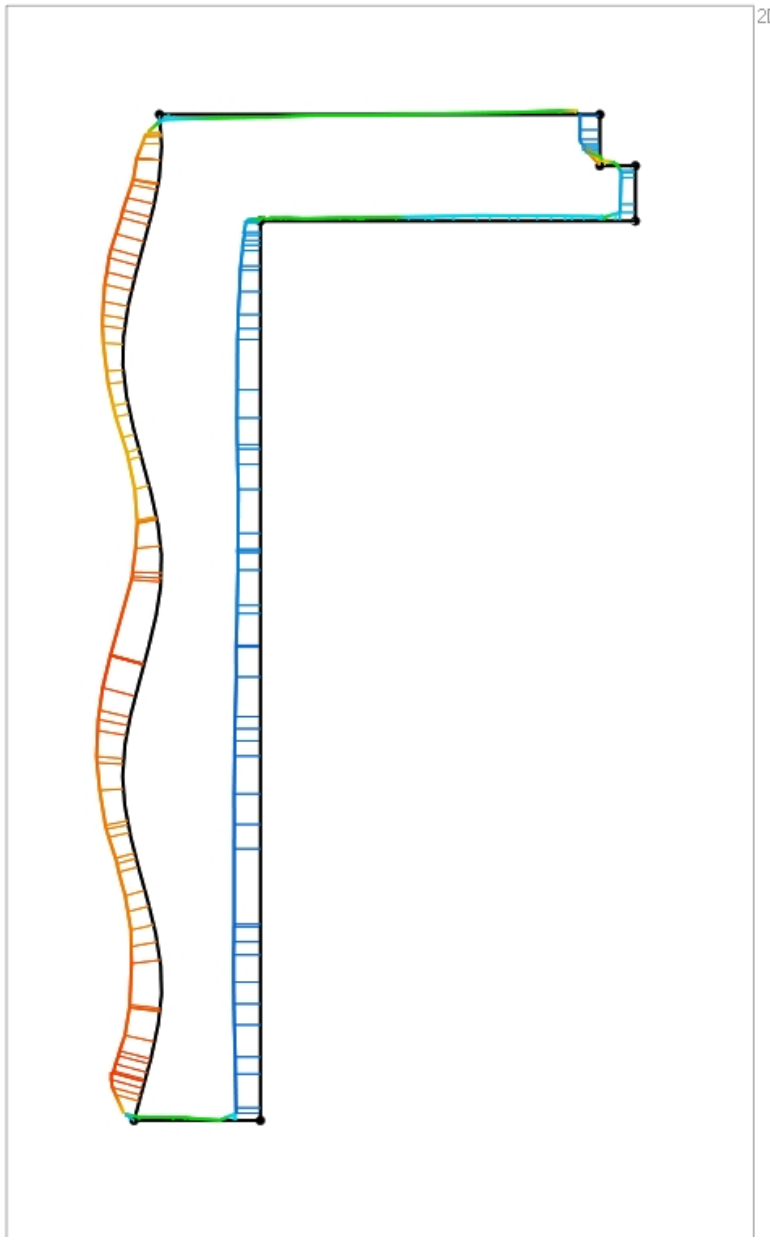


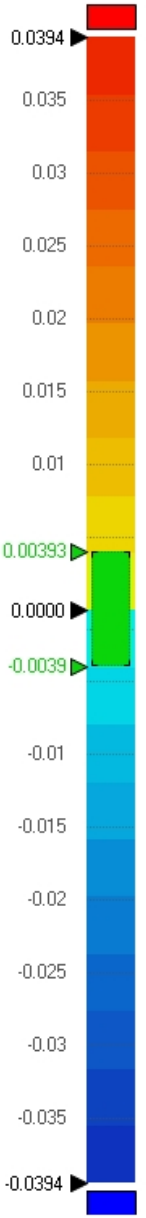


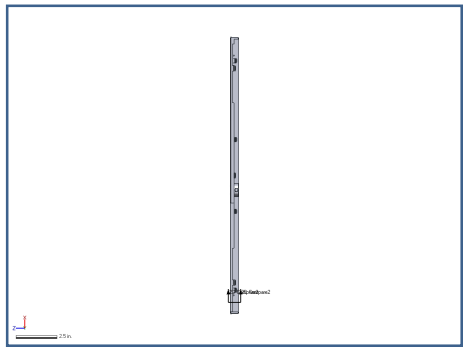
Min.	-0.1464
Max.	0.0496
Avg.	-0.0169
RMS	0.0378
Std. Dev.	0.0339
Var.	0.0291
+Avg.	0.0249
-Avg.	-0.0352
In Tol.(%)	13.0357
Out Tol.(%)	86.9643
Over Tol.(%)	21.6071
Under Tol.(%)	65.3571

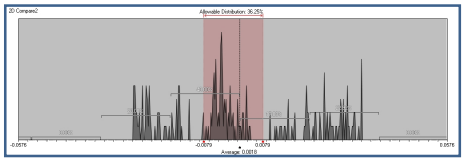
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare2





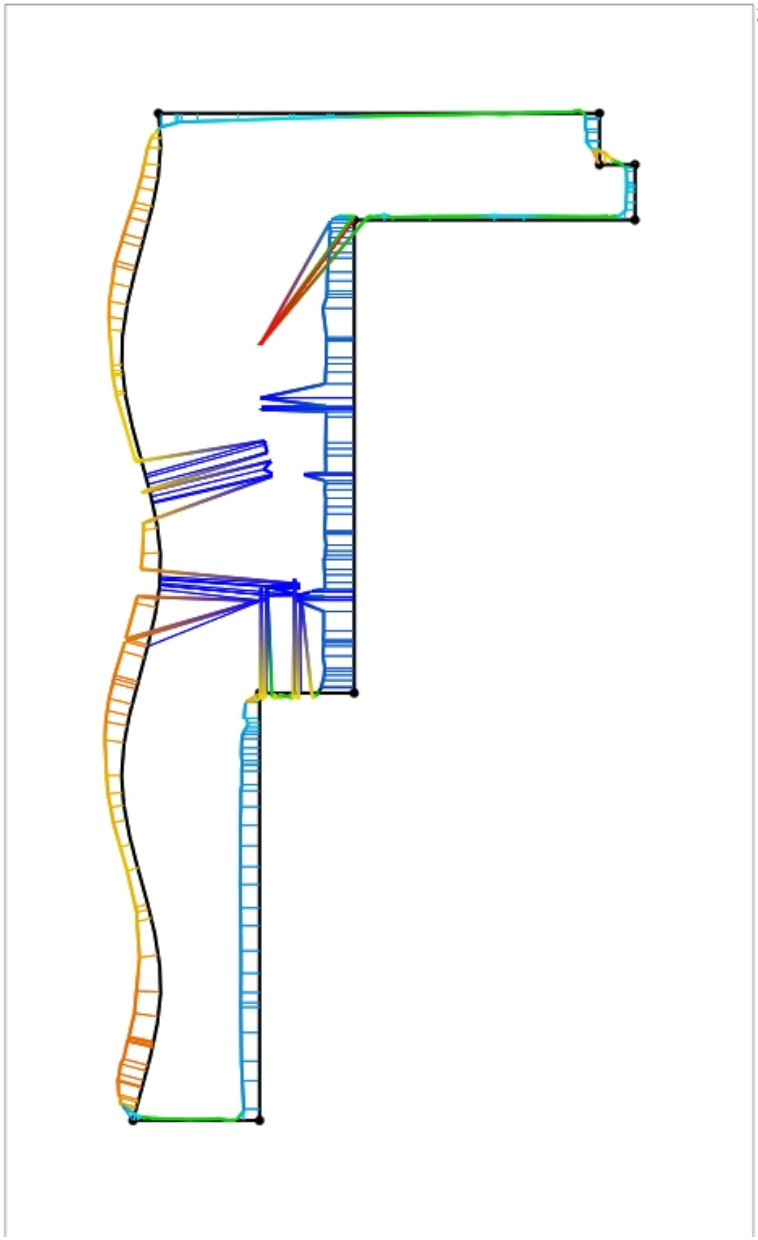


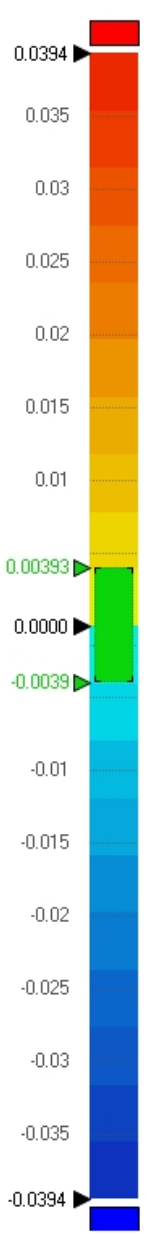


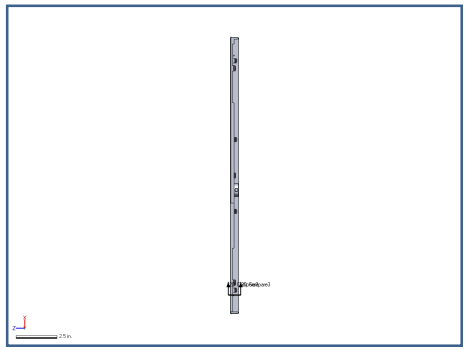
Min.	-0.0267
Max.	0.0346
Avg.	0.0018
RMS	0.0187
Std. Dev.	0.0186
Var.	0.0088
+Avg.	0.0204
-Avg.	-0.0118
In Tol.(%)	36.25
Out Tol.(%)	63.75
Over Tol.(%)	34.5833
Under Tol.(%)	29.1667

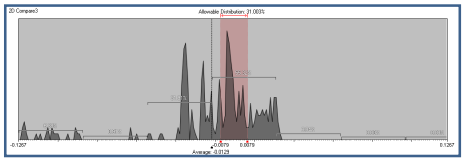
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare3





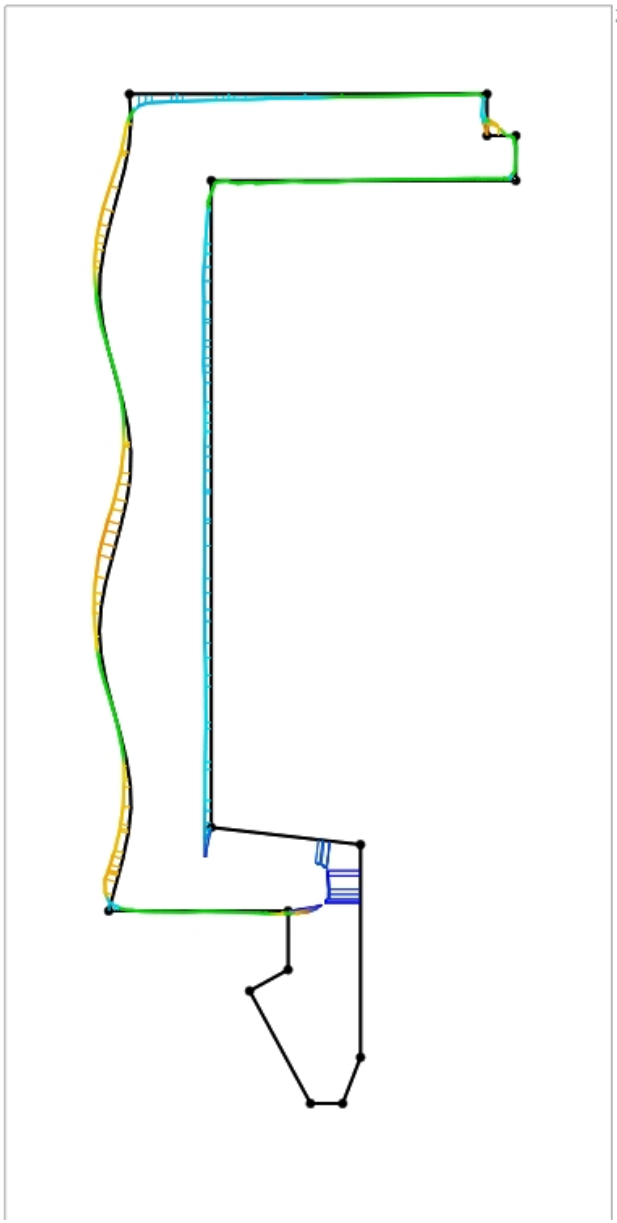


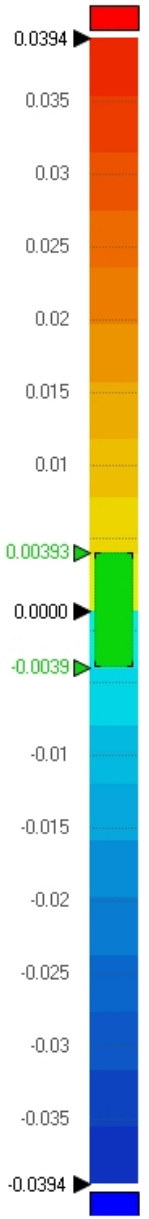


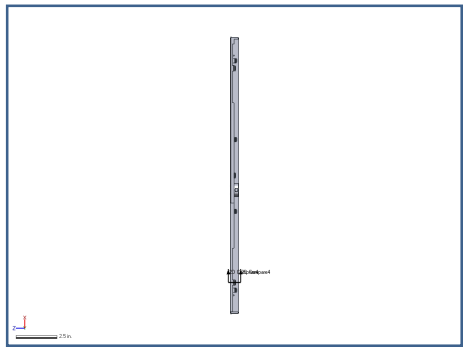
Min.	-0.1398
Max.	0.1558
Avg.	-0.0129
RMS	0.0401
Std. Dev.	0.0379
Var.	0.0365
+Avg.	0.0175
-Avg.	-0.0278
In Tol.(%)	31.003
Out Tol.(%)	68.997
Over Tol.(%)	22.7964
Under Tol.(%)	46.2006

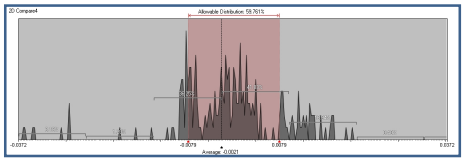
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare4





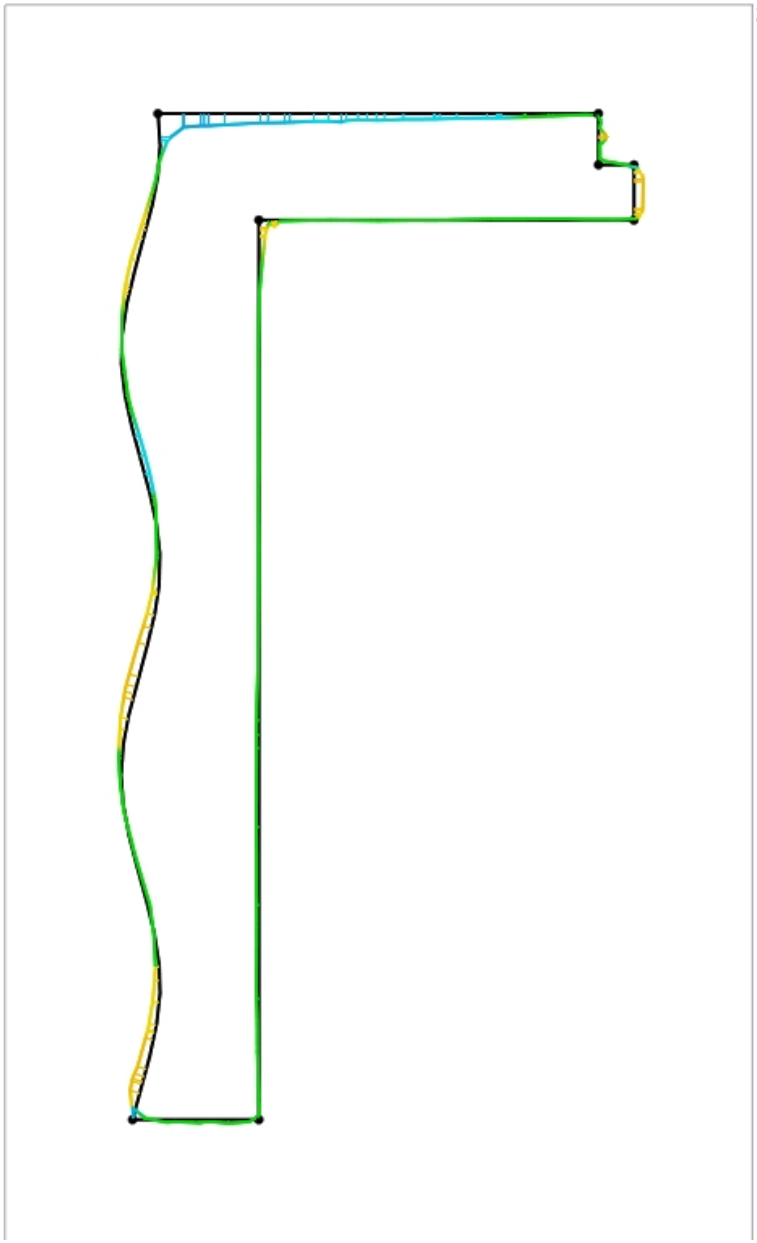


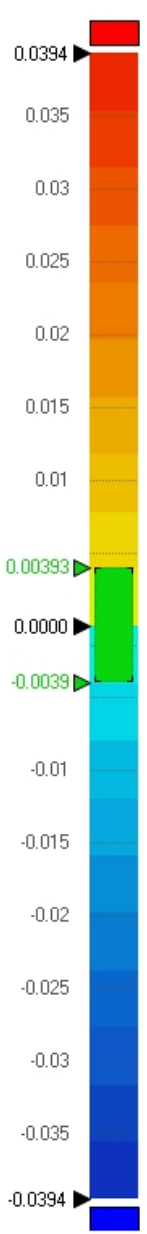


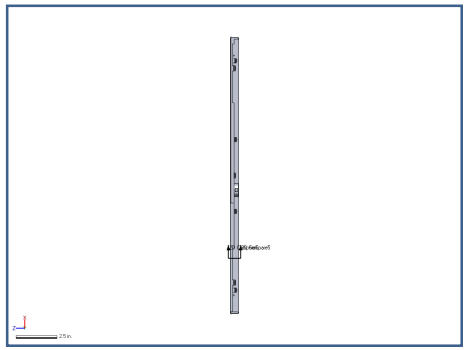
Min.	-0.0439
Max.	0.0245
Avg.	-0.0021
RMS	0.0119
Std. Dev.	0.0117
Var.	0.0035
+Avg.	0.0067
-Avg.	-0.0088
In Tol.(%)	59.761
Out Tol.(%)	40.239
Over Tol.(%)	19.1235
Under Tol.(%)	21.1155

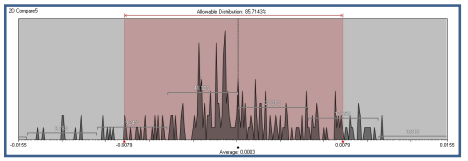
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare5





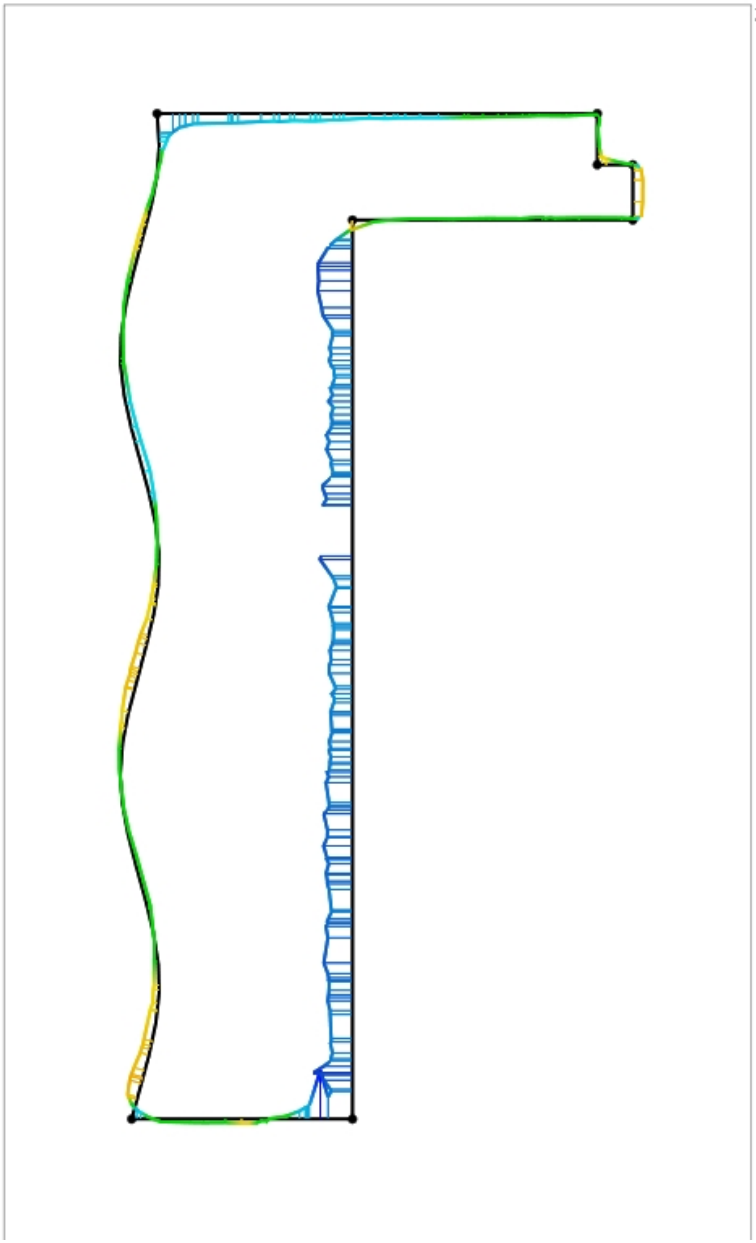


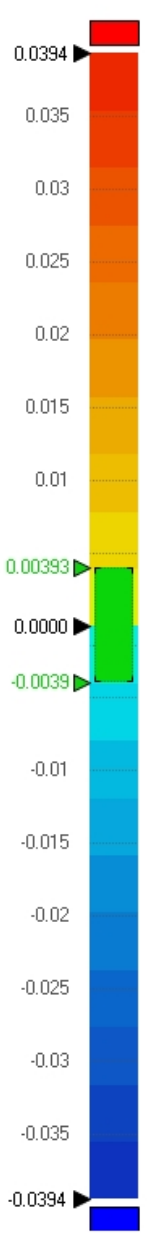


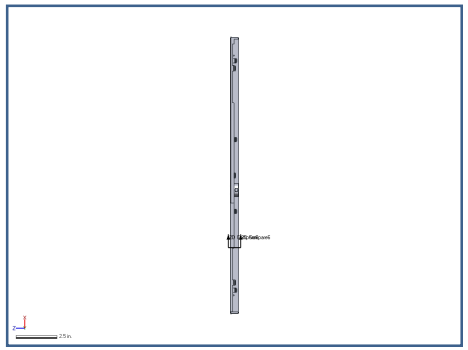
Min.	-0.0141
Max.	0.0108
Avg.	0.0003
RMS	0.0051
Std. Dev.	0.0051
Var.	0.0007
+Avg.	0.0044
-Avg.	-0.0034
In Tol.(%)	85.7143
Out Tol.(%)	14.2857
Over Tol.(%)	8.4034
Under Tol.(%)	5.8824

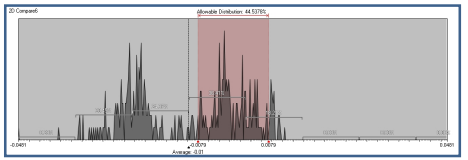
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare6





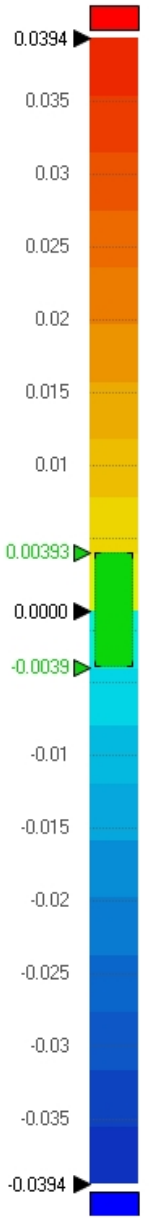


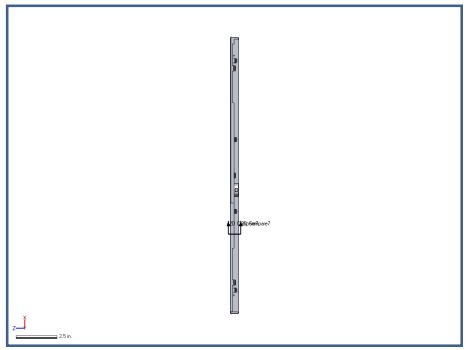


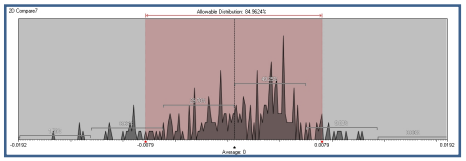
Min.	-0.0482
Max.	0.0122
Avg.	-0.01
RMS	0.0162
Std. Dev.	0.0127
Var.	0.0041
+Avg.	0.0051
-Avg.	-0.0154
In Tol.(%)	44.5378
Out Tol.(%)	55.4622
Over Tol.(%)	7.563
Under Tol.(%)	47.8992

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare7



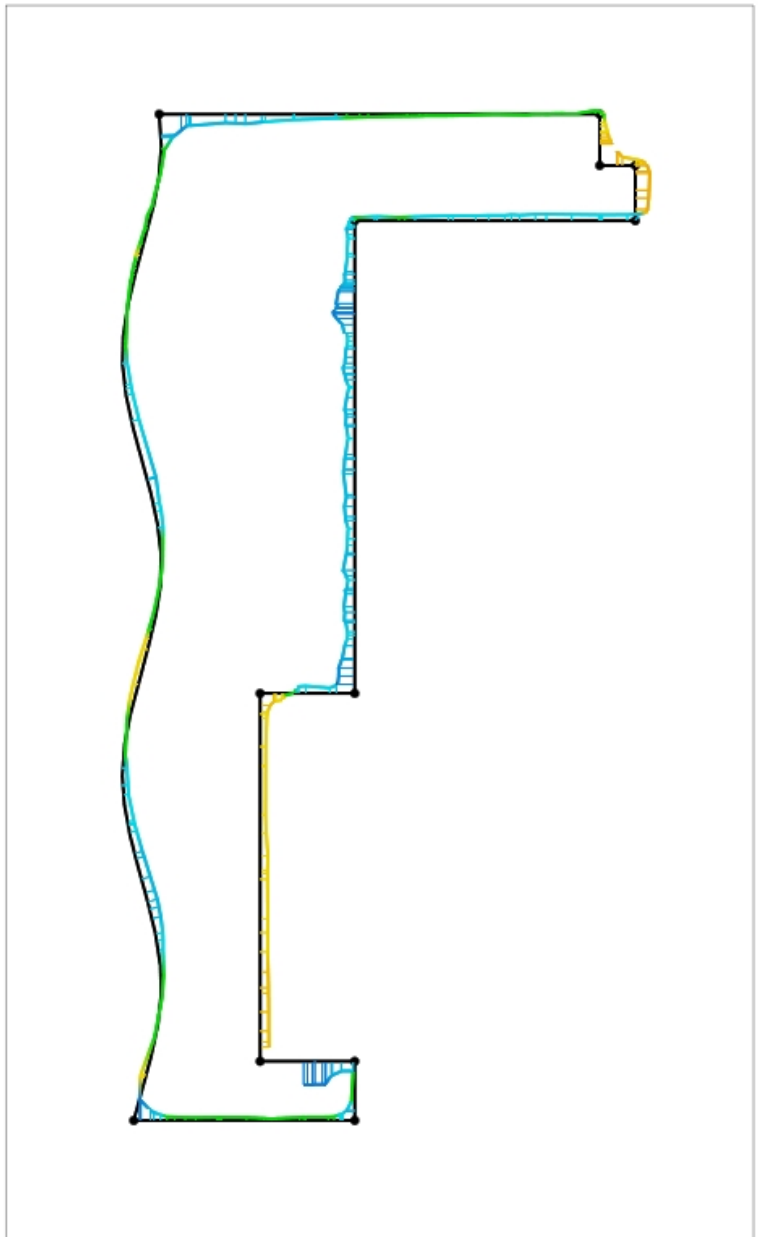


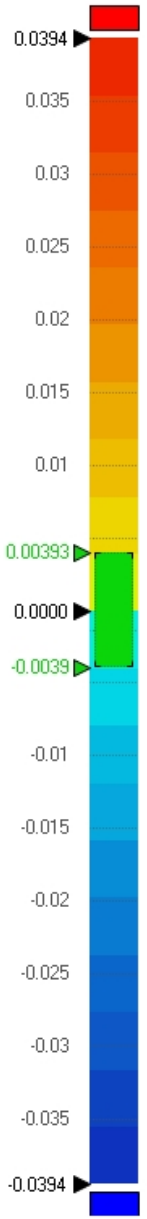


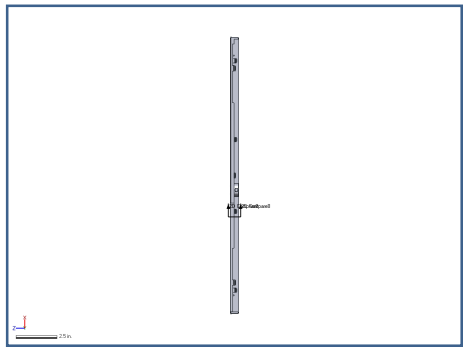
Min.	-0.028
Max.	0.0118
Avg.	0
RMS	0.0064
Std. Dev.	0.0064
Var.	0.001
+Avg.	0.004
-Avg.	-0.0055
In Tol.(%)	84.9624
Out Tol.(%)	15.0376
Over Tol.(%)	4.8872
Under Tol.(%)	10.1504

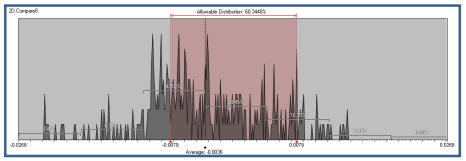
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare8





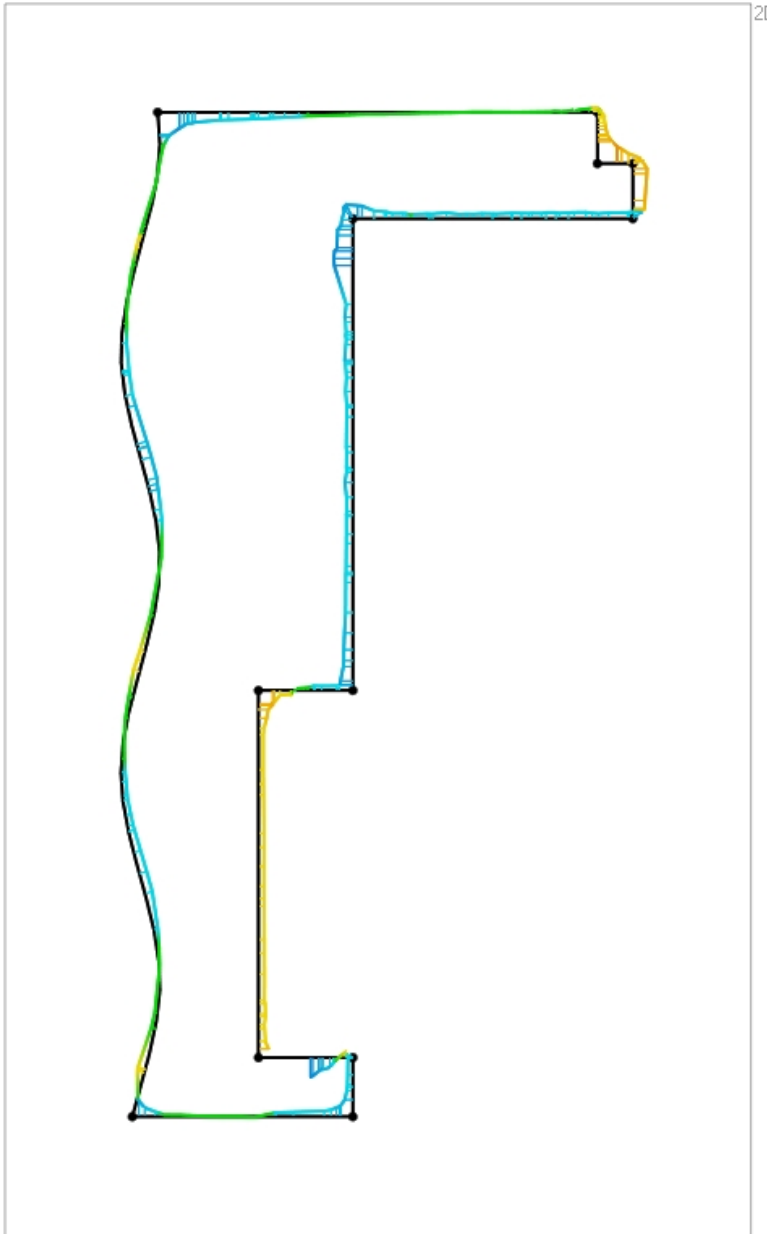


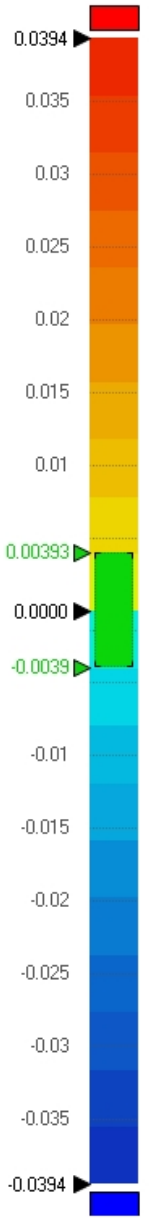


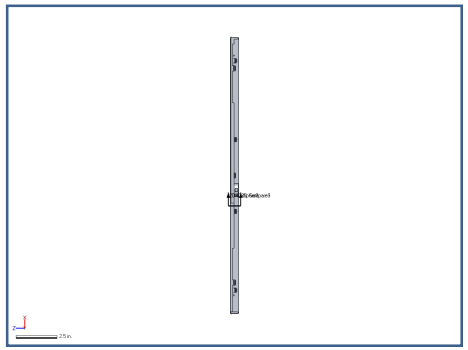
Min.	-0.0235
Max.	0.0144
Avg.	-0.0036
RMS	0.0085
Std. Dev.	0.0078
Var.	0.0015
+Avg.	0.0057
-Avg.	-0.0077
In Tol.(%)	60.3448
Out Tol.(%)	39.6552
Over Tol.(%)	8.908
Under Tol.(%)	30.7471

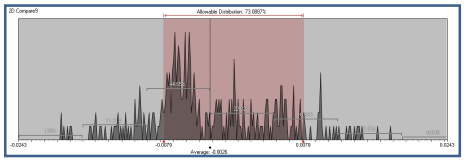
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare9





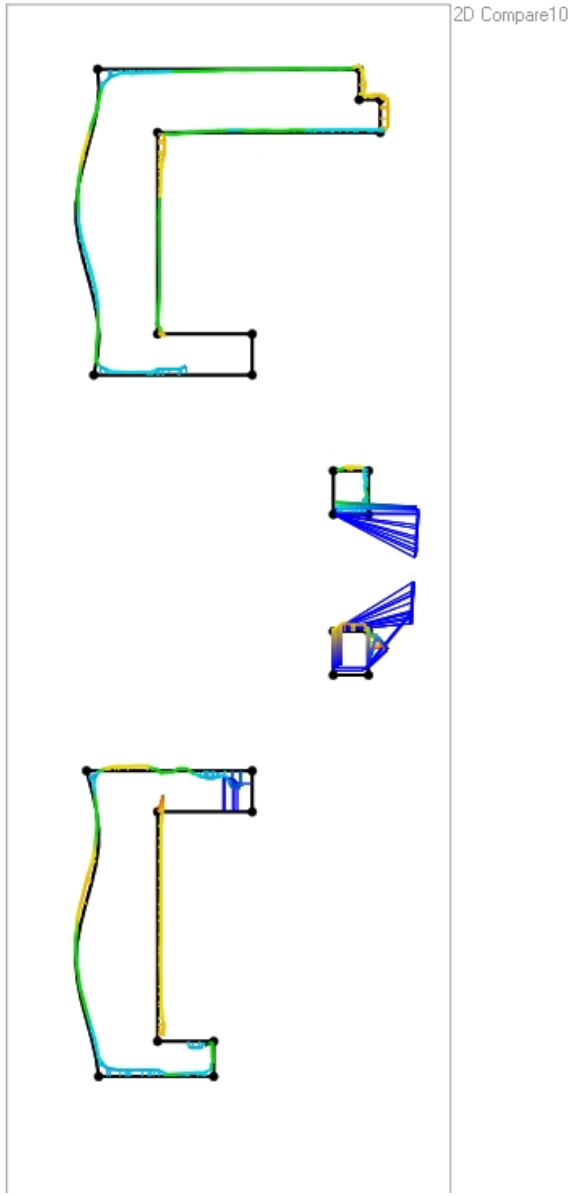


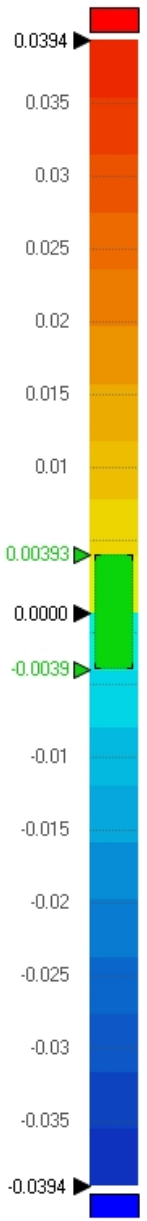


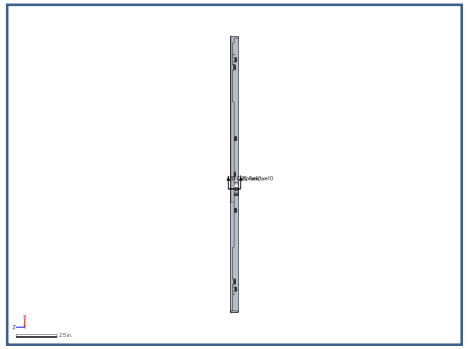
Min.	-0.0195
Max.	0.0179
Avg.	-0.0026
RMS	0.0077
Std. Dev.	0.0072
Var.	0.0013
+Avg.	0.0058
-Avg.	-0.0069
In Tol.(%)	73.0887
Out Tol.(%)	26.9113
Over Tol.(%)	8.8685
Under Tol.(%)	18.0428

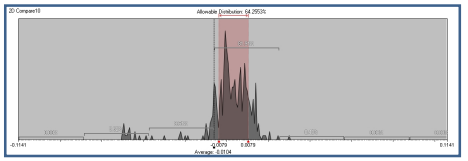
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare10





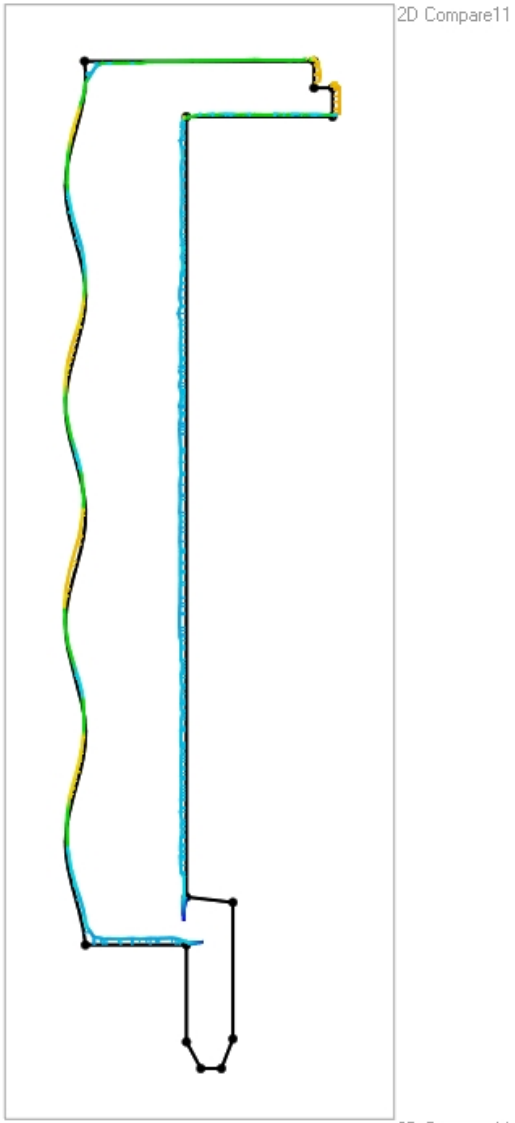


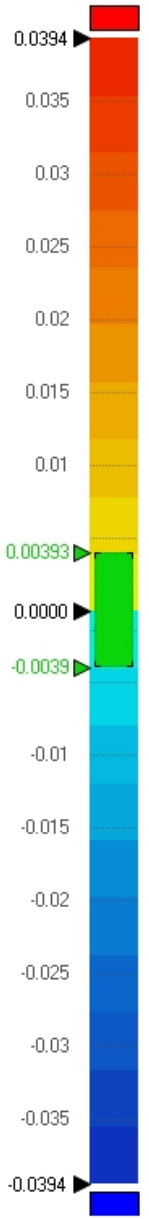


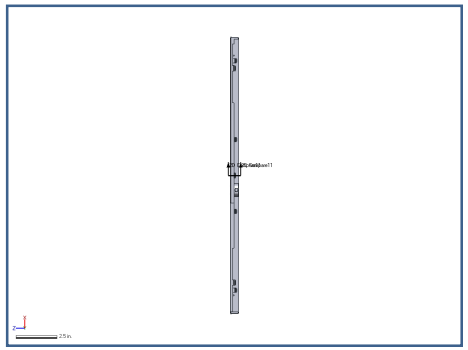
Min.	-0.1578
Max.	0.0303
Avg.	-0.0104
RMS	0.0361
Std. Dev.	0.0346
Var.	0.0303
+Avg.	0.0065
-Avg.	-0.0225
In Tol.(%)	64.2553
Out Tol.(%)	35.7447
Over Tol.(%)	12.5532
Under Tol.(%)	23.1915

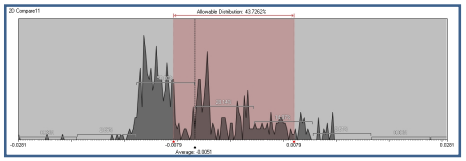
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare11





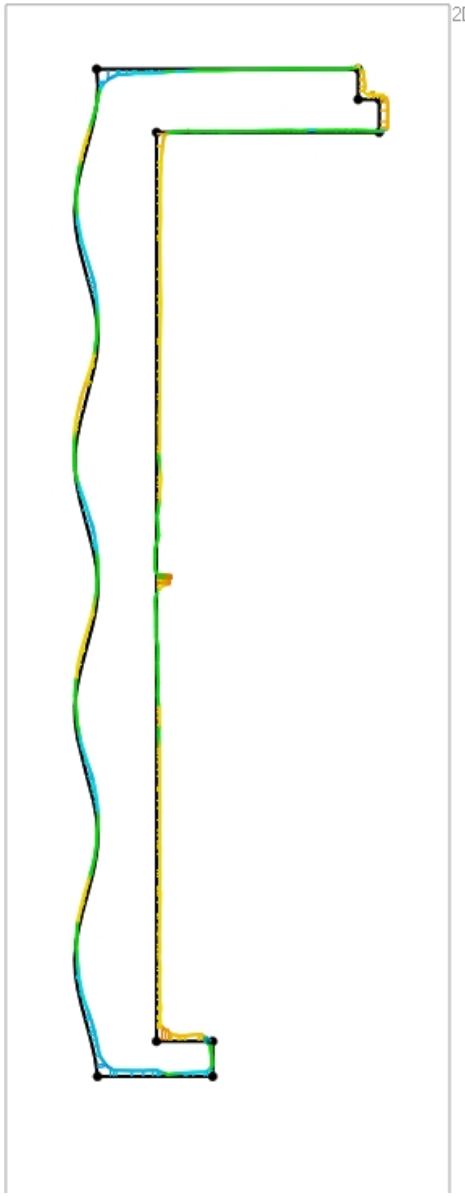


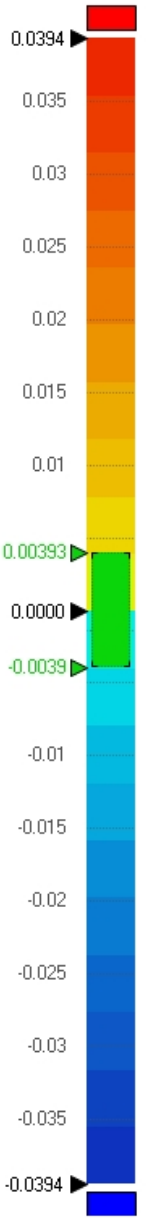


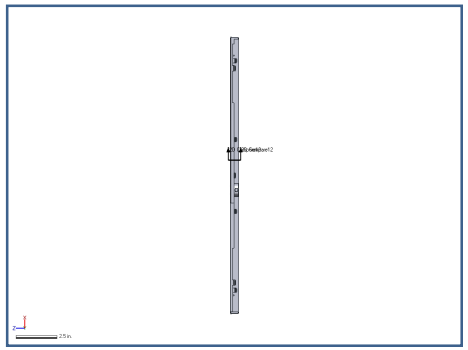
Min.	-0.0458
Max.	0.0132
Avg.	-0.0051
RMS	0.0092
Std. Dev.	0.0077
Var.	0.0015
+Avg.	0.0054
-Avg.	-0.0088
In Tol.(%)	43.7262
Out Tol.(%)	56.2738
Over Tol.(%)	7.4144
Under Tol.(%)	48.8593

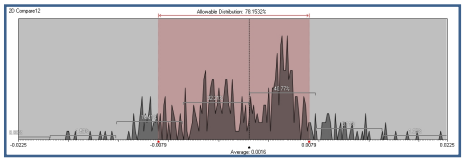
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare12





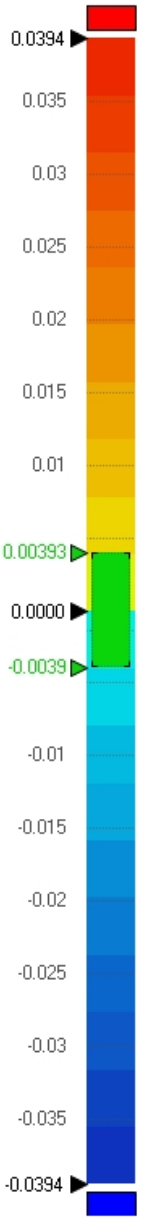


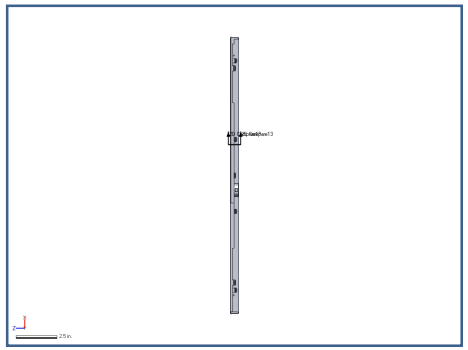


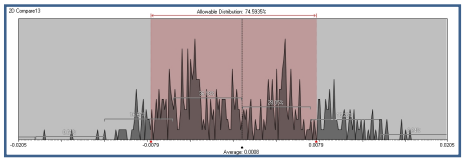
Min.	-0.0174
Max.	0.0271
Avg.	0.0016
RMS	0.0071
Std. Dev.	0.0069
Var.	0.0012
+Avg.	0.0064
-Avg.	-0.0046
In Tol.(%)	78.1532
Out Tol.(%)	21.8468
Over Tol.(%)	12.1622
Under Tol.(%)	9.6847

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare13



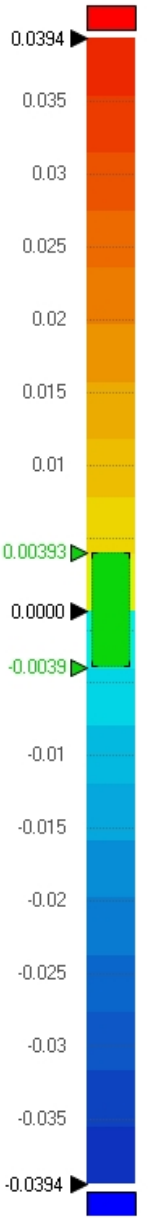


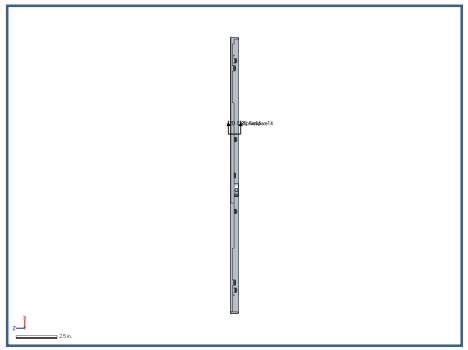


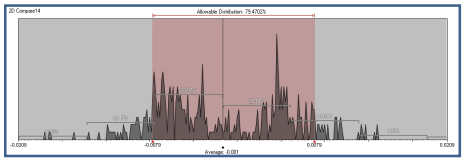
Min.	-0.0179
Max.	0.017
Avg.	0.0008
RMS	0.0066
Std. Dev.	0.0066
Var.	0.0011
+Avg.	0.0063
-Avg.	-0.0049
In Tol.(%)	74.5935
Out Tol.(%)	25.4065
Over Tol.(%)	17.6829
Under Tol.(%)	7.7236

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare14



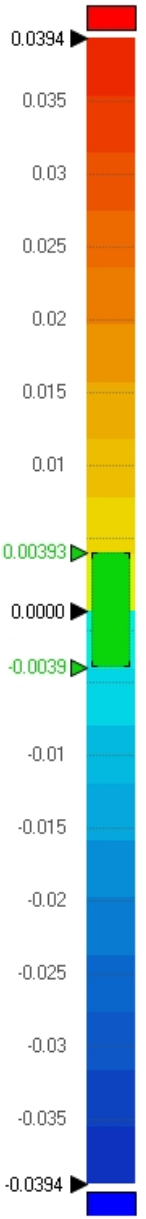


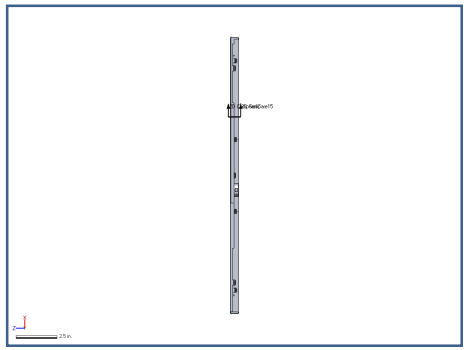


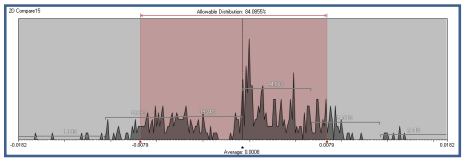
Min.	-0.0221
Max.	0.0142
Avg.	-0.001
RMS	0.0067
Std. Dev.	0.0066
Var.	0.0011
+Avg.	0.0055
-Avg.	-0.0062
In Tol.(%)	79.4702
Out Tol.(%)	20.5298
Over Tol.(%)	8.3885
Under Tol.(%)	12.1413

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare15



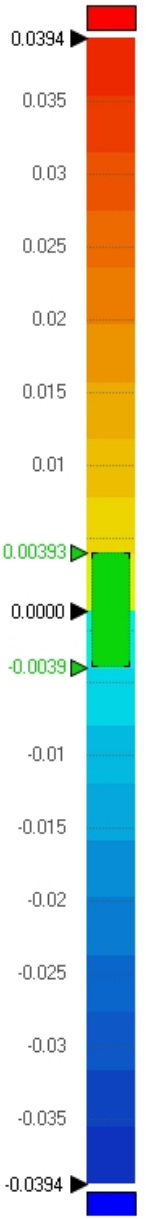


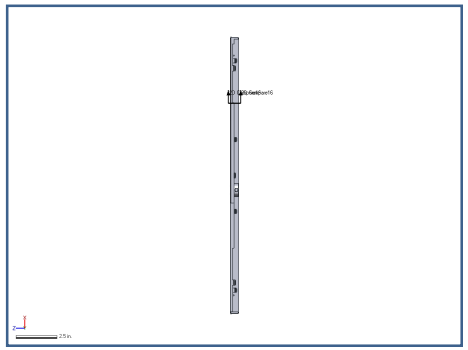


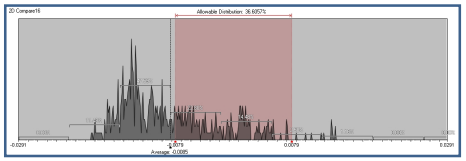
Min.	-0.0186
Max.	0.0146
Avg.	0.0008
RMS	0.0059
Std. Dev.	0.0058
Var.	0.0009
+Avg.	0.0044
-Avg.	-0.006
In Tol.(%)	84.0855
Out Tol.(%)	15.9145
Over Tol.(%)	9.2637
Under Tol.(%)	6.6508

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare16



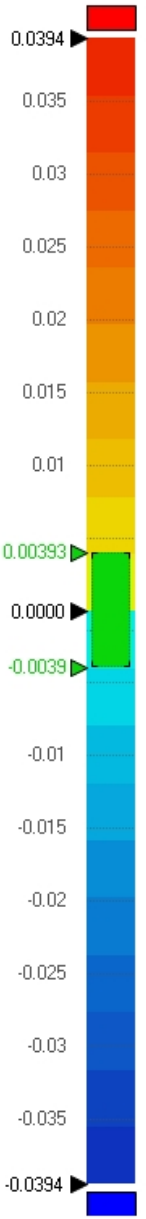


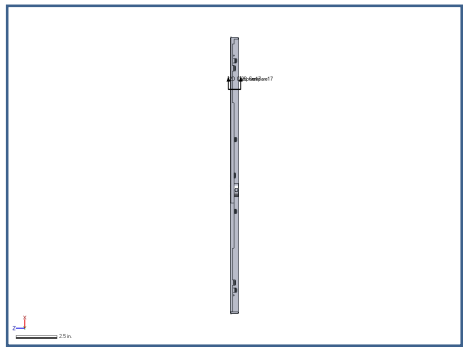


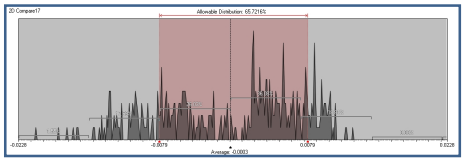
Min.	-0.0192
Max.	0.0139
Avg.	-0.0085
RMS	0.0109
Std. Dev.	0.0068
Var.	0.0012
+Avg.	0.004
-Avg.	-0.0108
In Tol.(%)	36.6057
Out Tol.(%)	63.3943
Over Tol.(%)	1.8303
Under Tol.(%)	61.5641

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare17



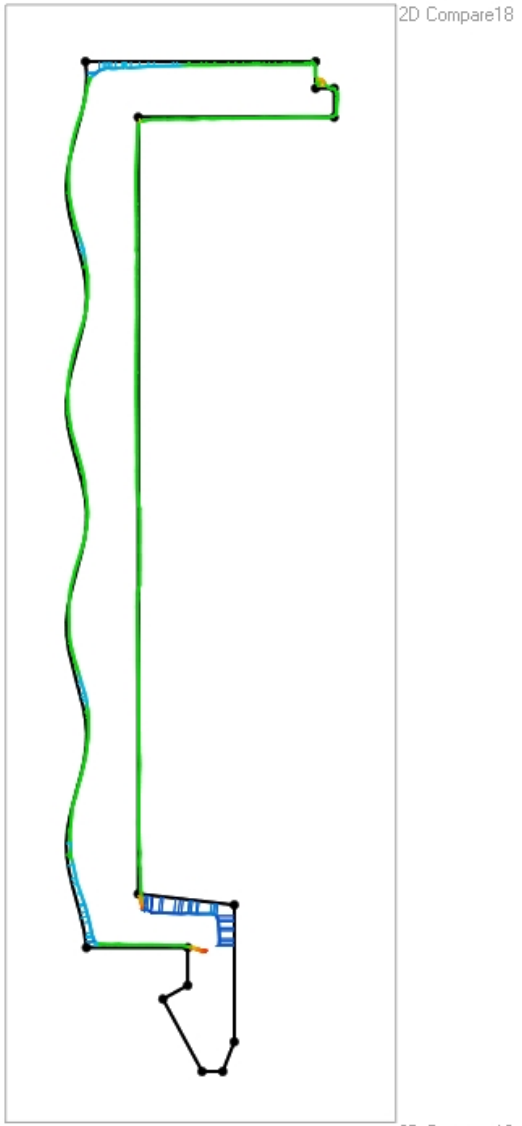


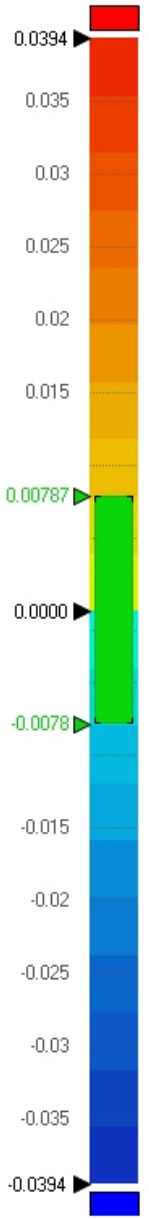


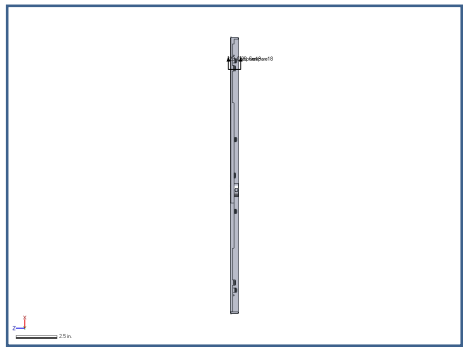
Min.	-0.0209
Max.	0.0128
Avg.	-0.0003
RMS	0.0075
Std. Dev.	0.0075
Var.	0.0014
+Avg.	0.0058
-Avg.	-0.0075
In Tol.(%)	65.7216
Out Tol.(%)	34.2784
Over Tol.(%)	15.4639
Under Tol.(%)	18.8144

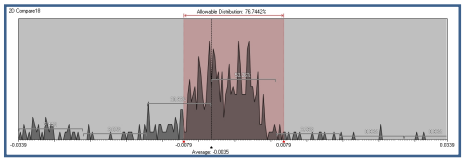
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare18





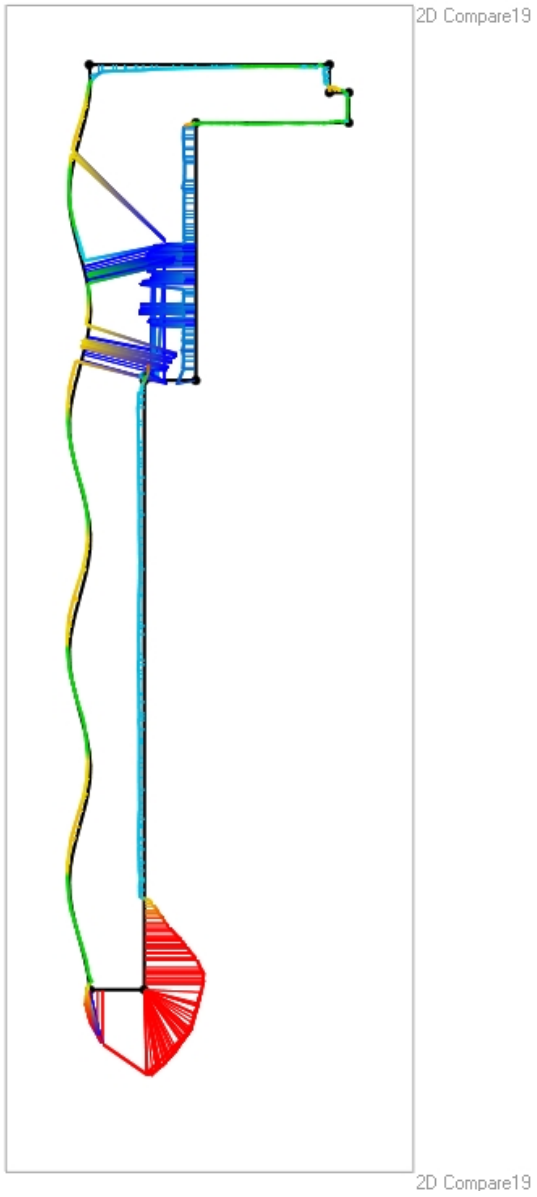


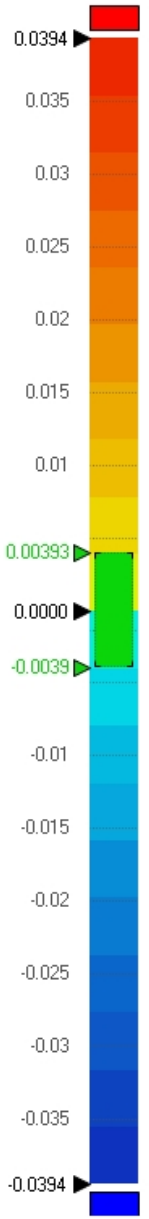


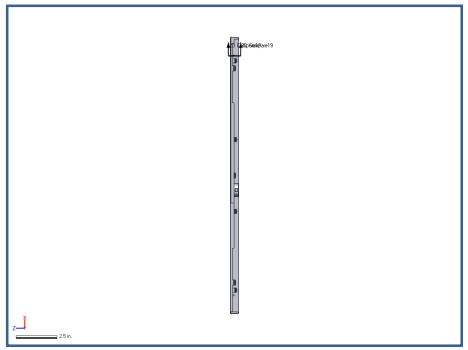
Min.	-0.0335
Max.	0.0388
Avg.	-0.0035
RMS	0.0107
Std. Dev.	0.0101
Var.	0.0026
+Avg.	0.0047
-Avg.	-0.0081
In Tol.(%)	76.7442
Out Tol.(%)	23.2558
Over Tol.(%)	4.6512
Under Tol.(%)	18.6047

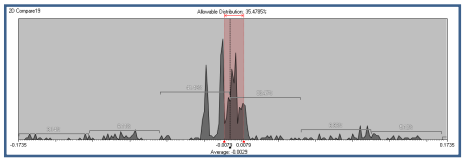
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare19





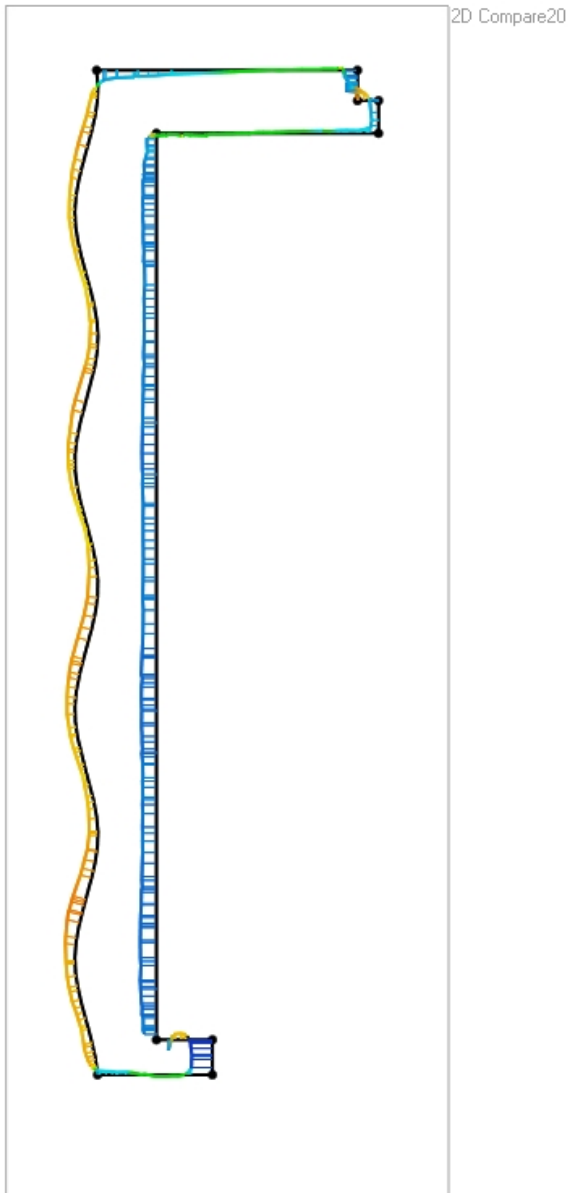


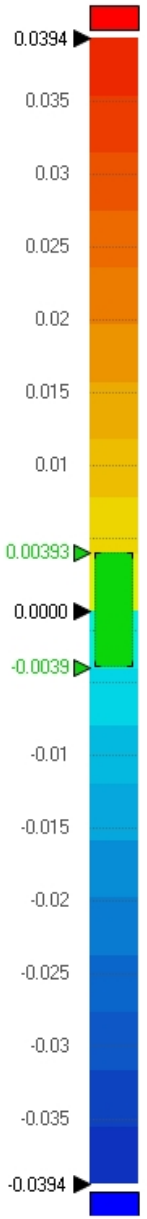


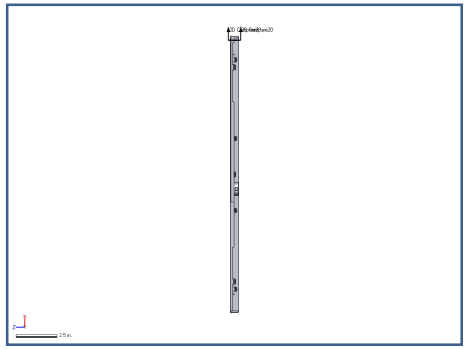
Min.	-0.2276
Max.	0.1548
Avg.	-0.0029
RMS	0.0569
Std. Dev.	0.0569
Var.	0.0821
+Avg.	0.0383
-Avg.	-0.03
In Tol.(%)	35.4785
Out Tol.(%)	64.5215
Over Tol.(%)	20.6271
Under Tol.(%)	43.8944

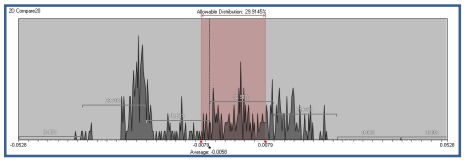
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare20





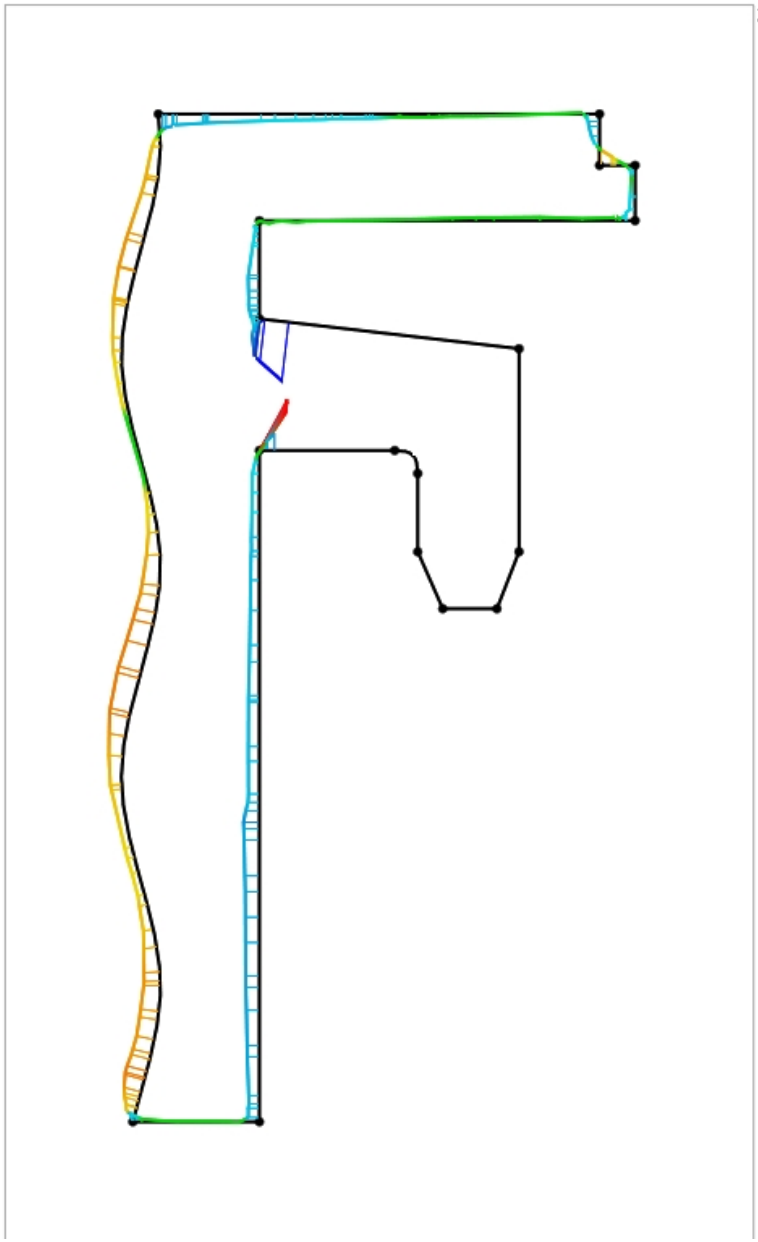


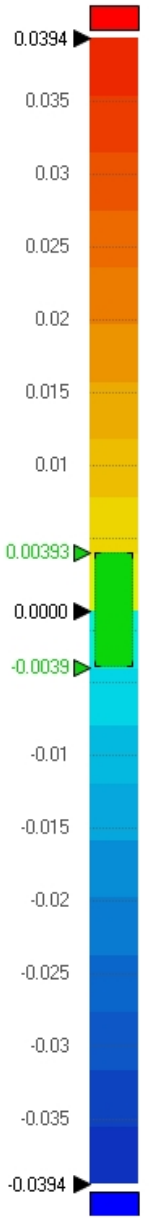


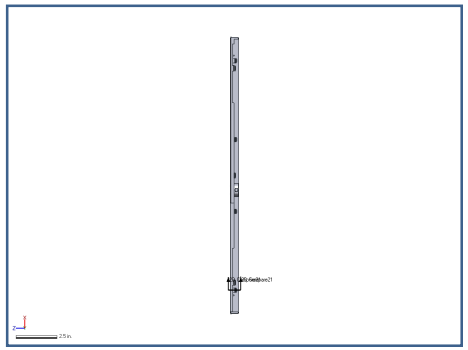
Min.	-0.0387
Max.	0.023
Avg.	-0.0058
RMS	0.0167
Std. Dev.	0.0157
Var.	0.0062
+Avg.	0.0096
-Avg.	-0.0178
In Tol.(%)	29.9145
Out Tol.(%)	70.0855
Over Tol.(%)	26.7094
Under Tol.(%)	43.3761

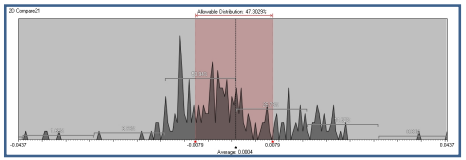
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare21





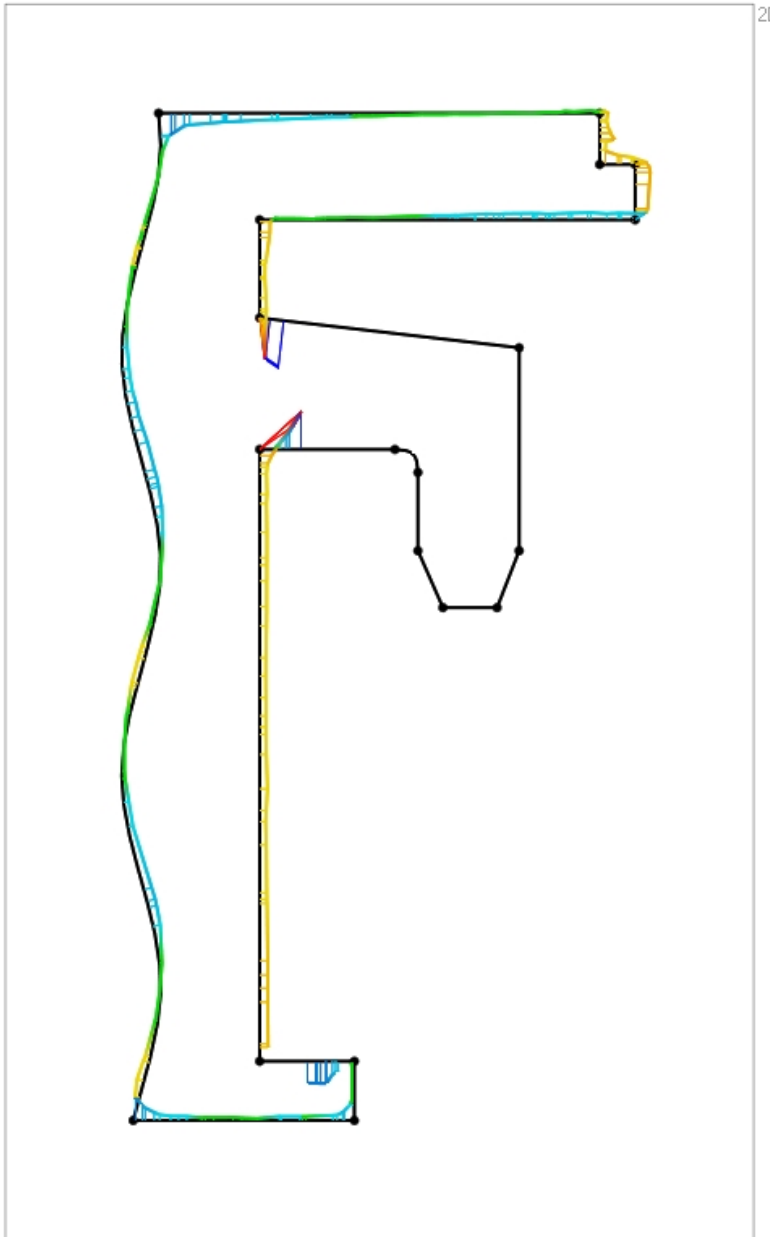


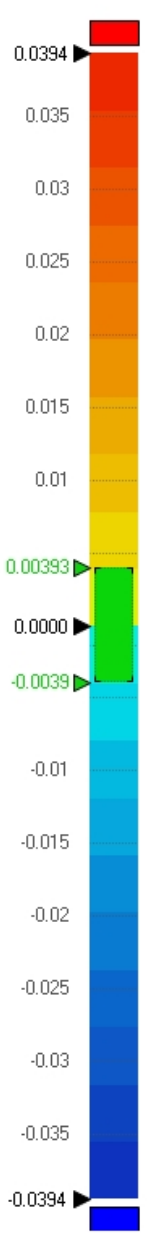


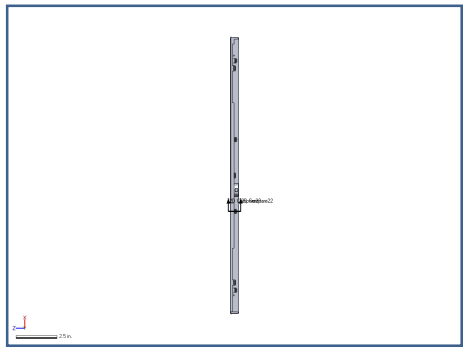
Min.	-0.0587
Max.	0.0568
Avg.	0.0004
RMS	0.0145
Std. Dev.	0.0145
Var.	0.0053
+Avg.	0.0131
-Avg.	-0.0083
In Tol.(%)	47.3029
Out Tol.(%)	52.6971
Over Tol.(%)	25.7261
Under Tol.(%)	26.971

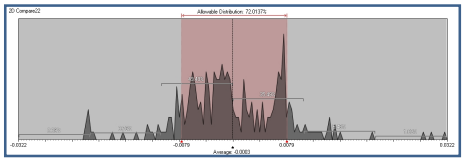
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare22





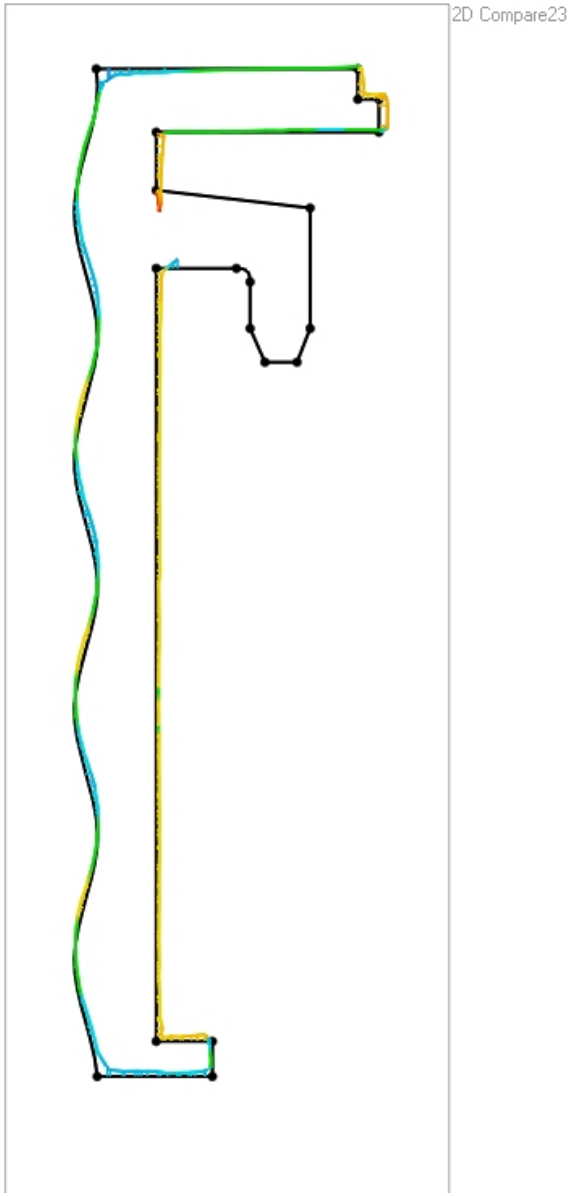


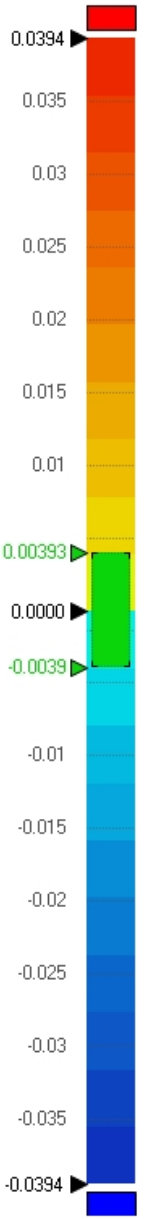


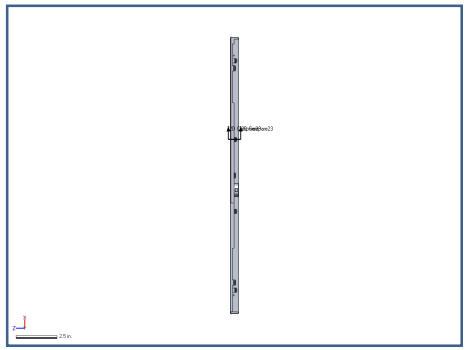
Min.	-0.0465
Max.	0.0558
Avg.	-0.0003
RMS	0.0107
Std. Dev.	0.0106
Var.	0.0029
+Avg.	0.0082
-Avg.	-0.0065
In Tol.(%)	72.0137
Out Tol.(%)	27.9863
Over Tol.(%)	12.628
Under Tol.(%)	15.3584

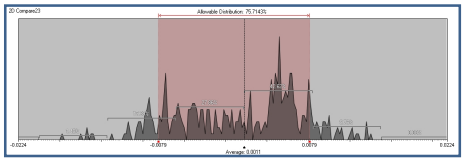
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare23





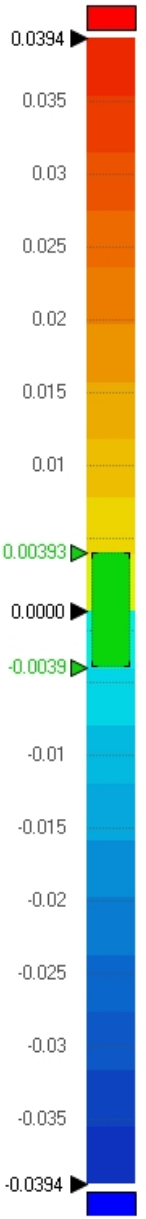


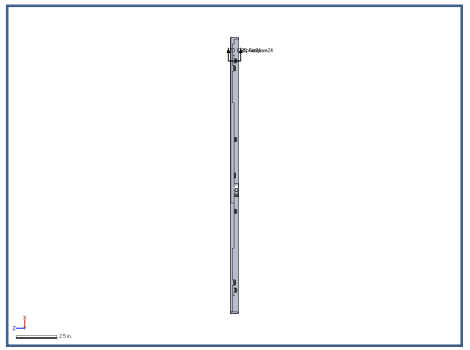


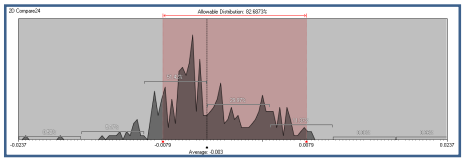
Min.	-0.0178
Max.	0.0374
Avg.	0.0011
RMS	0.0072
Std. Dev.	0.0071
Var.	0.0013
+Avg.	0.0061
-Avg.	-0.0057
In Tol.(%)	75.7143
Out Tol.(%)	24.2857
Over Tol.(%)	13.3333
Under Tol.(%)	10.9524

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare24



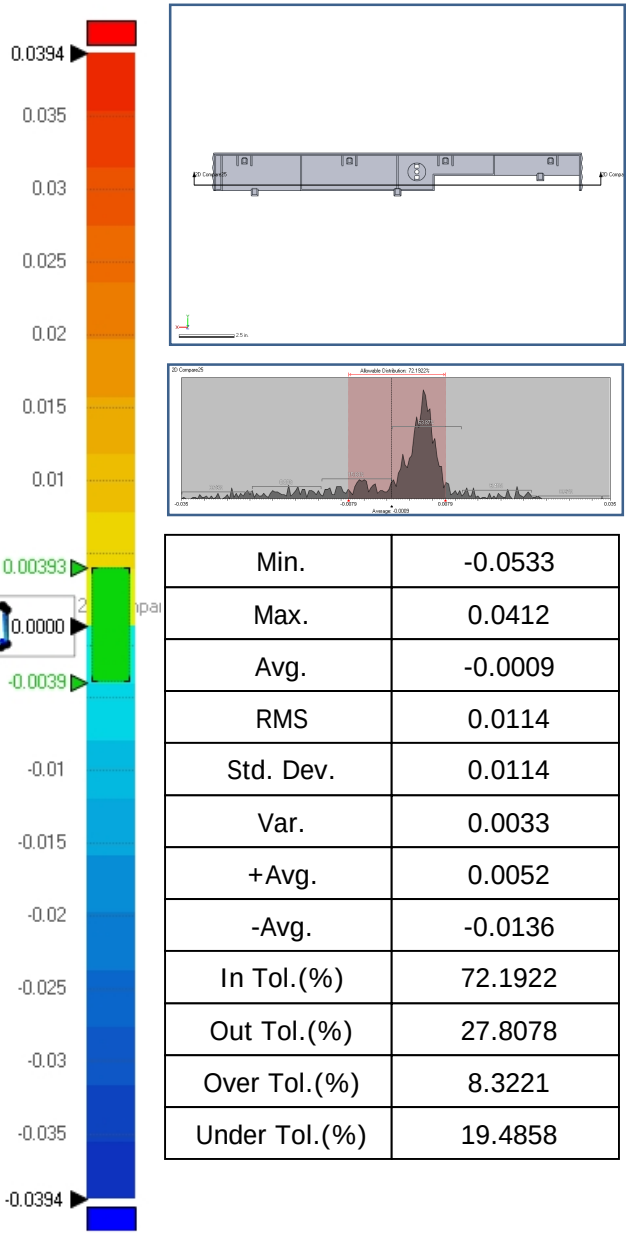




Min.	-0.0469
Max.	0.0508
Avg.	-0.003
RMS	0.0075
Std. Dev.	0.0069
Var.	0.0012
+Avg.	0.0048
-Avg.	-0.0058
In Tol.(%)	82.6873
Out Tol.(%)	17.3127
Over Tol.(%)	1.8088
Under Tol.(%)	15.5039

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

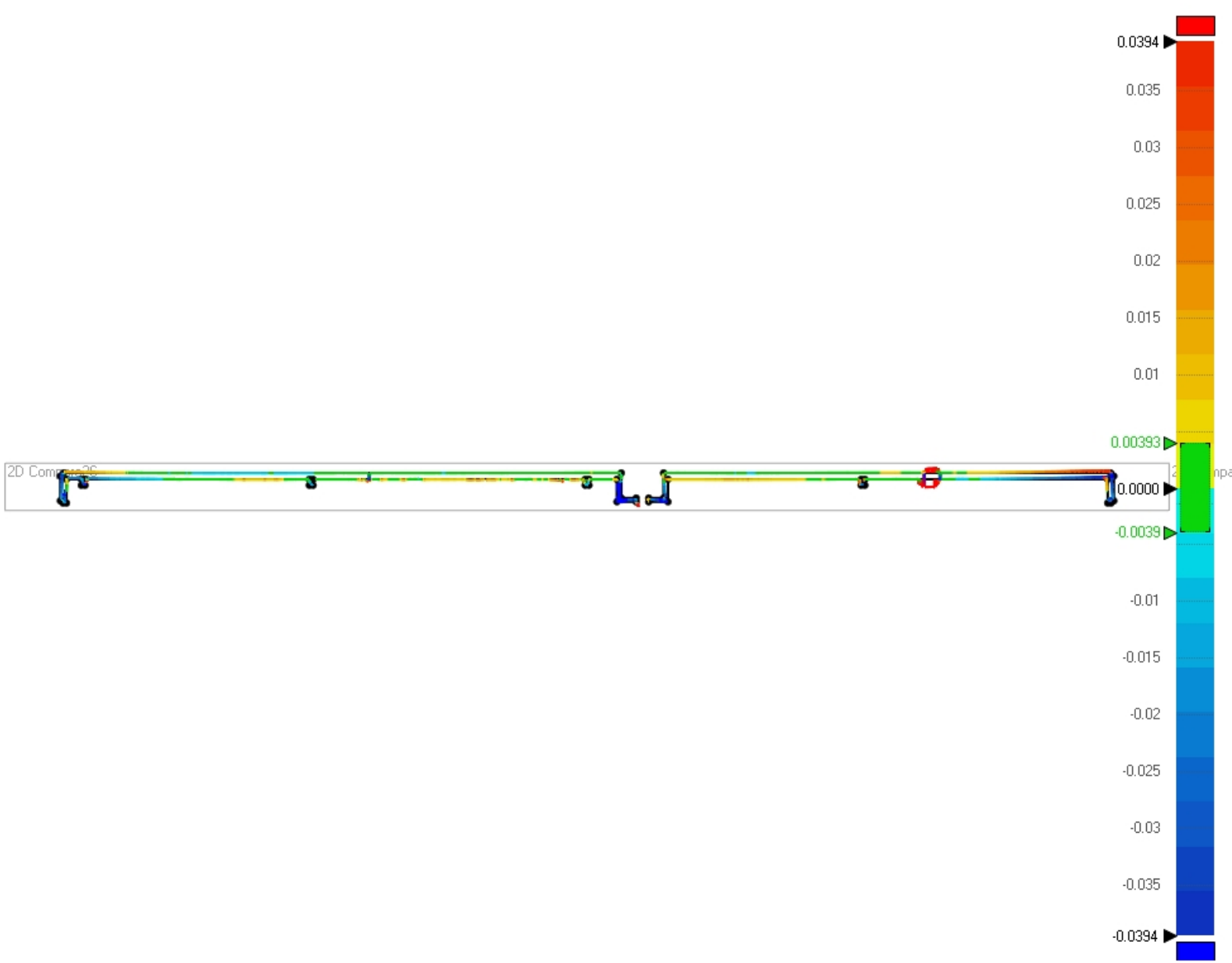
2D Compare25

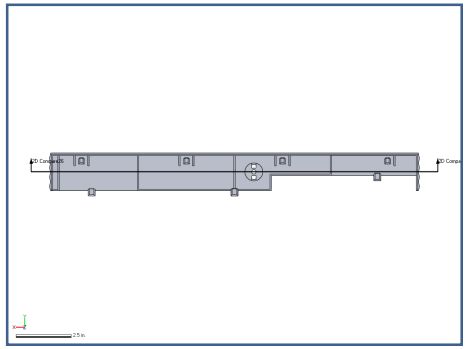


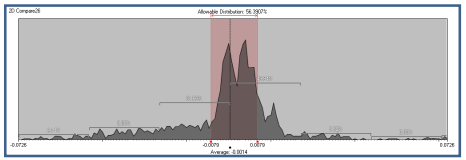
Min.	-0.0533
Max.	0.0412
Avg.	-0.0009
RMS	0.0114
Std. Dev.	0.0114
Var.	0.0033
+Avg.	0.0052
-Avg.	-0.0136
In Tol.(%)	72.1922
Out Tol.(%)	27.8078
Over Tol.(%)	8.3221
Under Tol.(%)	19.4858

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare26



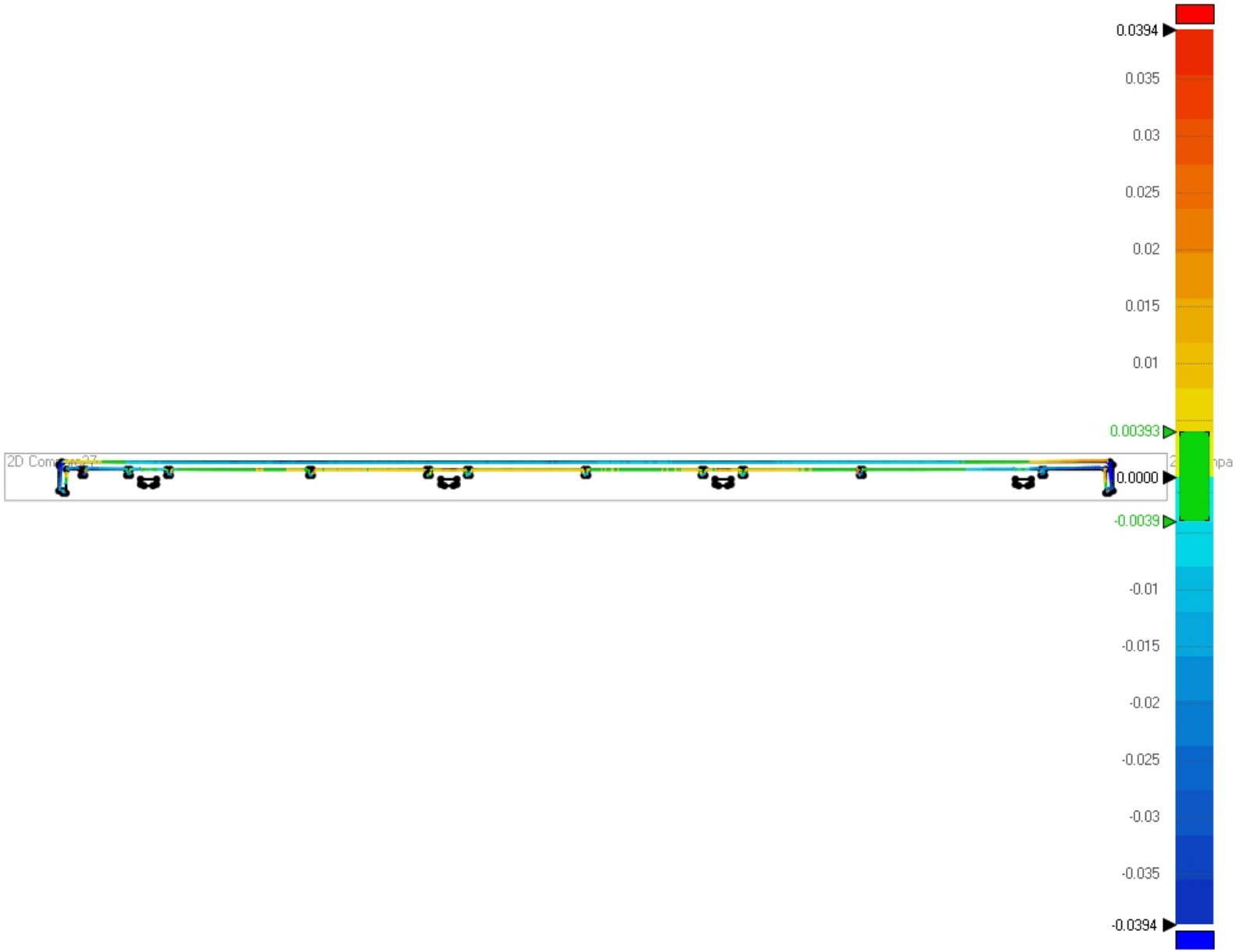


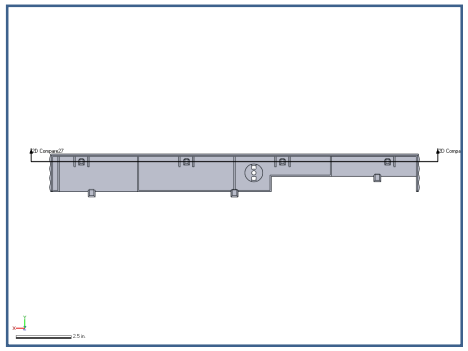


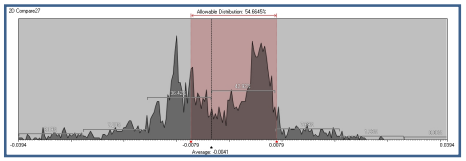
Min.	-0.1172
Max.	0.1238
Avg.	-0.0014
RMS	0.0238
Std. Dev.	0.0237
Var.	0.0143
+Avg.	0.0126
-Avg.	-0.0158
In Tol.(%)	56.3907
Out Tol.(%)	43.6093
Over Tol.(%)	19.6108
Under Tol.(%)	23.9985

Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

2D Compare27



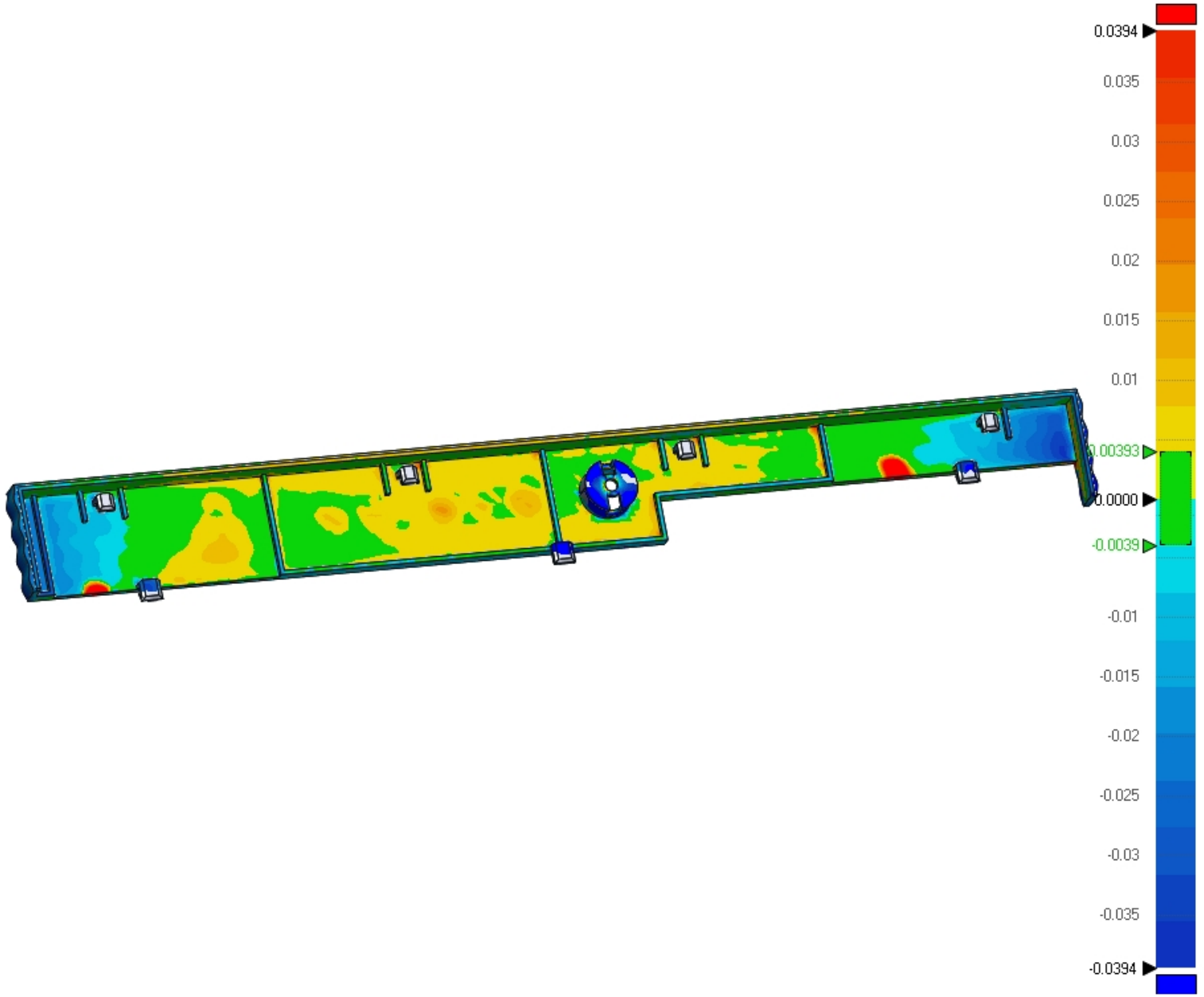




Min.	-0.0541
Max.	0.0282
Avg.	-0.0041
RMS	0.0125
Std. Dev.	0.0117
Var.	0.0035
+Avg.	0.0062
-Avg.	-0.0119
In Tol.(%)	54.6645
Out Tol.(%)	45.3355
Over Tol.(%)	8.5106
Under Tol.(%)	36.8249

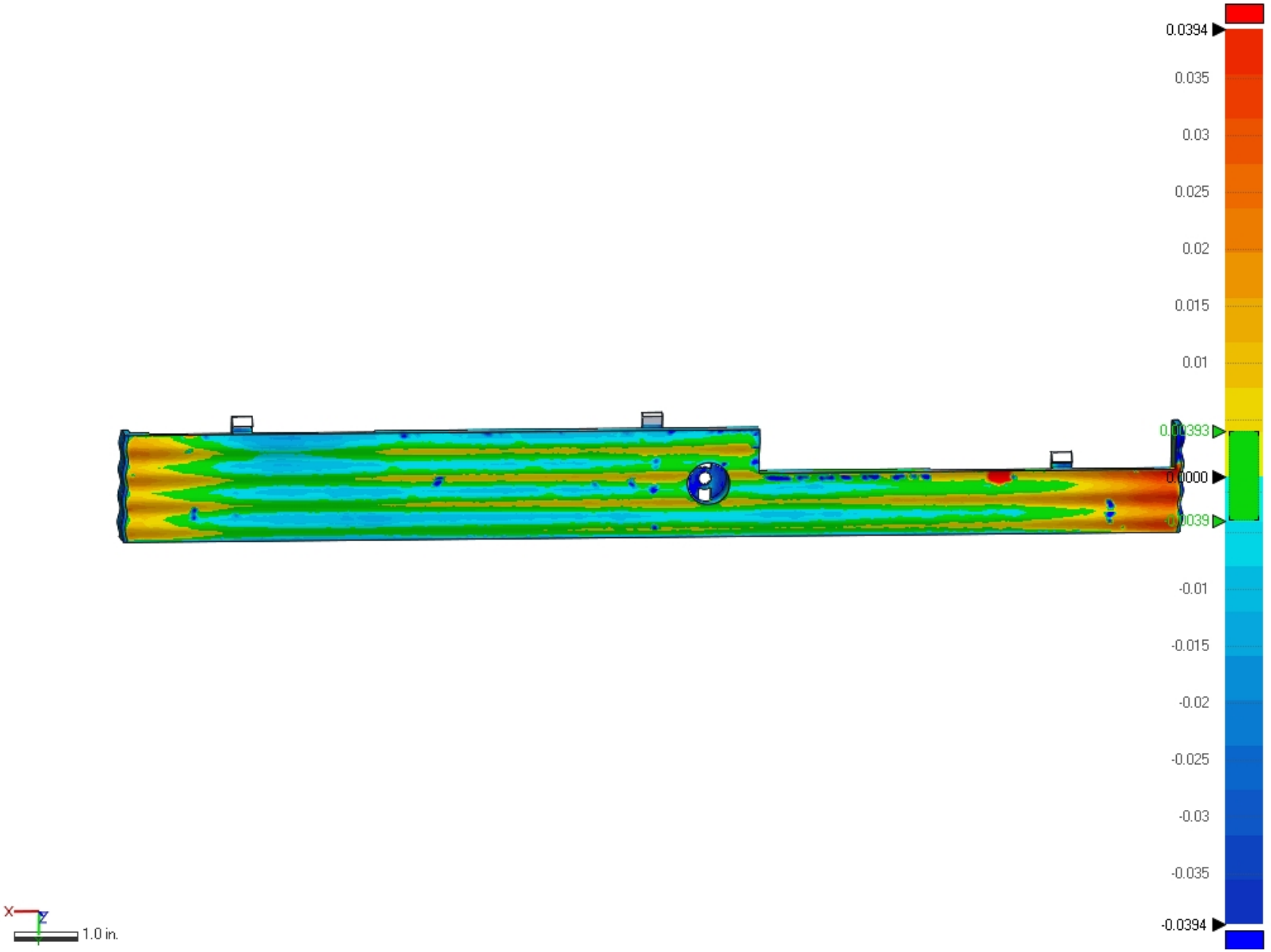
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

Custom View1



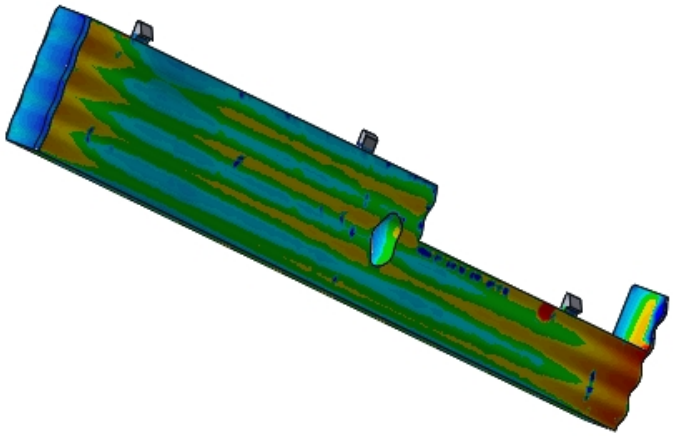
Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

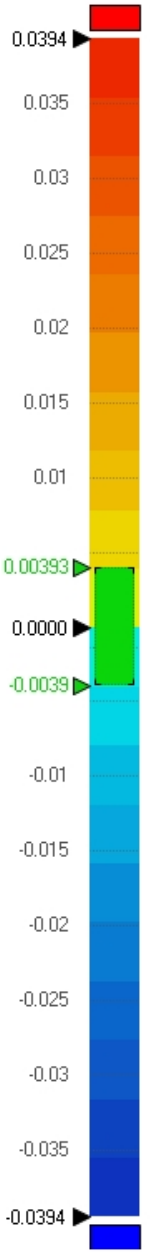
Custom View2

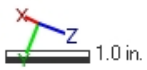


Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

Custom View3

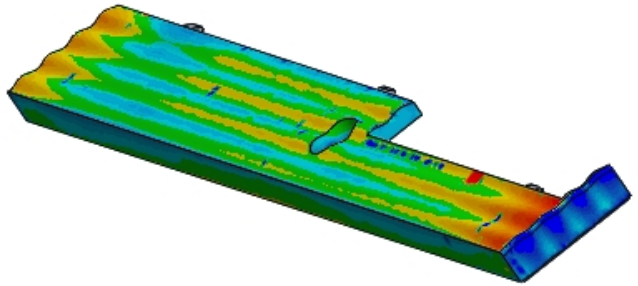


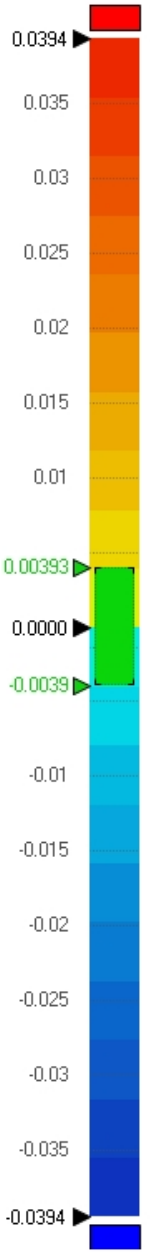


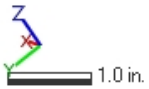


Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.

Custom View4







Product Name	[Product Name]	Department	[Department]	Date	Jan 05, 2020
Part Name	[Part Name]	Inspector	[Inspector]	Unit	in.